Lincoln County, West Virginia
Table H.--Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

		1	Classif	ication	Fragi	ments			e passir		1	
Map symbol	Depth	USDA texture	I		_		1	sieve n	umber		Liquid	
and soil name				1 2200000		3-10		1 10	1 10		limit	
			Unified	AASHTO	inches	inches	4	10	40	200		index
	   In	<u> </u>	<u>'</u>		-'   Pct	   Pct	'	' 		 	   Pct	¦
					1							
2:				[	1							
Nelse		Silt loam,   loam, fine	CL, ML, CL-ML	A-4, A-6		0 	90-100 	90-100 	80-100 	65-90 	20-30	NP-10
	! 	sandy loam,		i I	i	! 	! 	İ	! 	' 	<u>'</u>	i
	I	sandy loam	i	İ	i	I	i	I	i	İ	i	i
	5-18		CL, ML, CL-ML	A-4, A-6	i		90-100	80-100	80-95	55 <b>-</b> 95	20-30	NP-10
		sandy loam,			1							
		silt loam			1							
	18-40	Stratified		A-2-4, A-4		0	90-100	80-100	60-85	30-45	5-15	NP-5
		sandy loam,	SC-SM, SM	[	1							
	•	stratified			I							
		loam,			I			l				
		stratified										
		fine sandy		!	!							
		loam,   stratified			!							
		stratified   loamy sand										
			ML, CL-ML,	  A-2-4, A-4		I I 0	100-100	   0 0 _ 1 0 0	1 160-05	130-45	0-10	IND_5
	1 40-05		SC-SM, SM	A-Z-4, A-4		1 0	190-100	100-100	100-03	130-43	1 0-10	INE-2
	 	stratified	5C-5M, 5M	I I	i i	l I	 	l I	 	l I	1	1
	 	fine sandy		l I	i	! 	1	 	 	l I	1	1
	! 	loam,		l I	i	! 	 	! 	 	l I		1
	! 	stratified		i I	i	! 	! 	İ	! 	' 		i
	I	loam,	i	İ	i	I	i	i I	i	İ	i	i
	İ	stratified	i	İ	i	I	i İ	İ	İ	I	i	İ
	Ì	sandy loam	İ	l	İ	ĺ	ĺ	ĺ	İ	ĺ	İ	Ì
Grigsby						 		 		 		
Chavies						 		 		 		
Middlebury	 			 		 	 	 		 		
Yeager						 		 		 		

Print date: 06/19/2002

Table H.--Engineering Index Properties--Continued

		!	Classif	ication	Fragi	ments			e passi			
Map symbol	Depth	USDA texture		I	>10	1 2 10	:	sieve n	umber		Liquid	
and soil name		 	   Unified	   AASHTO	•	3-10  inches	4	10	40	200	limit 	ticit <u>\</u>  index 
	In	1	 	 	Pct	Pct	¦	<u></u>	¦	¦	Pct	
3A:		 	 	 	1	 	 	 		1		 
Sensabaugh		Loam, fine   sandy loam,   silt loam	CL, ML, CL-ML	A-4 		0-5	90-100	  75-95 	65-85 	55 <b>-</b> 75	15-30	NP-10
	8-15	Loam, fine   sandy loam,   silt loam,   sandy clay   loam, silty	CL, ML, CL-ML       	A-4     	     	0-5     	90-100       	  75-95       	65-85     	55-75     	15-30     	NP-10       
	15-24	clay loam  Gravelly loam,   clay loam,   sandy clay   loam, gravelly   silt loam,   silty clay	ML, CL 	  A-4, A-6     	       	   0-5     	  75-90       	  65-75       	  55-65     	  40-55     	  20-35       	   5-15       
	24-30	loam  Gravelly fine   sandy loam,   loam, silt   loam, sandy   clay loam,	  CL, CL-ML,   SM, ML     	  A-4, A-6       	       	   0-5     	  75-90       	  65-75       	  55-65     	  40-55     	  20-35     	   5-15       
	30-40	fine sandy   loam, loam,   sandy clay   loam, clay	    GC, GC-GM,   SC, SC-SM   	     A-2, A-4, A-6       	         	     0-5     	      55-90     	      25-75     	    25-65     	    20-55     	    20-35     	       5-15     
	40-65	loam   	  GC-GM, SC,   SC-SM, GC	  A-6, A-4, A-2 		   0-10 	  55-90 	  25 <b>-</b> 75 	25-65	20-55	20-35	   5 <b>-</b> 15 
Chagrin							 	 				 
Holly							 					 
Lobdell						 	 	 				 
Orrville								I		1		

Table H.--Engineering Index Properties--Continued

	l		Classif	ication	Fragi	ments			e passi		1	!
Map symbol   and soil name	Depth	USDA texture		1	   >10	1 2 10	:	sieve n	umber		Liquid  limit	
and soil name	   	 	   Unified	AASHTO		3-10  inches	4	10	40	200	- 1	ticity  index 
	In		 		Pct	Pct	! 	! 			Pct	
3B:	 		 			 	 	 				
Sensabaugh		Loam, fine   sandy loam,   silt loam	CL, CL-ML, ML 	A-4		0-5	90-100	75-95 	65-85 	55-75 	15-30 	NP-10 
	8-15     		CL-ML, CL, ML       	A-4     		0-5       	90-100       	75-95         	65-85       	55-75       	15-30       	NP-10       
	15-24       	Gravelly loam,   clay loam,   sandy clay   loam, gravelly   silt loam,   silty clay	CL, ML 	  A-4, A-6     	       	0-5       	  75-90         	  65-75         	55-65       	40-55         	20-35       	   5-15       
	       		  CL, ML, CL-   ML, SM     	  A-4, A-6       	           	   0-5         	  75-90           	  65-75           	  55-65         	40-55         	20-35           	   5-15         
	     	Sandy loam,	SC, GC-GM,  SC-SM, GC   	  A-2, A-4, A     	-6         	0-5       	  55-90       	  25-75         	25-65       	20-55       	20-35       	5-15       
	40-65		GC, GC-GM,   SC, SC-SM	A-2, A-4, A	-6	0-10	  55-90 	  25-75 	25-65	20-55	20-35	5-15
Grigsby												
Skidmore			 									
Lobdell			 									
Orrville	 		 				 	 				 

Table H.--Engineering Index Properties--Continued

		I	Classif	icatic	n	Fragi	ments			e passi	ng		1
Map symbol	Depth	USDA texture	!					:	sieve n	umber		Liquid	
and soil name	 	 	   Unified	l AA	SHTO	>10  inches		l	I 10	1 40	1 200	_ limit 	ticity  index
		i	i	i		i		i	İ		İ	i	
	In	1	1			Pct	Pct					Pct	
		1	I	1							I		
4:					2 4			100 100		150 05			
Grigsby		loam, sandy   loam, loam	SM, SC-SM   	A-2,   	A-4		0-3   	    80-100	    80-100	50-95   	25-50   	10-20   	NP-5   
	İ	Fine sandy   loam, loam,   sandy loam	SM, SC-SM	A-2,	A-4		0-3	80-100 	80-100 	50-95 	25-50 	10-20	NP-5 
	14-39	Fine sandy   loam, loam,	SM, SC-SM	A-2,	A-4		0-3	80-100	  80-100 	50-95 	25-50 	10-20	NP-5 
	39-45	sandy loam  Sandy loam,   loam	  SM, SC-SM 	  A-2, 	A-4		   0-4 	  80-100 	  80-100 	  50-95 	  25-50 	10-20	  NP-5 
			GC-GM, SC-SM,	A-1,	A-2, A-4		0-5 I	40-100	30-100	25 <b>-</b> 95	20-50	5-15	NP-5
	49-65 	Gravelly loamy   sand, gravelly   sandy loam	SC-SM, SM,	A-4, 	A-2, A-1		0-5   	40-100   	30-100   	25-95   	20-50   	5-15	NP-5   
Chagrin	 			 					 		 		
Middlebury									 		 		
5:	 	I I	 	1		1	 	 	l I	 	l I	1	 
Orrville	0-6	Loam, silt loam	CL-ML, ML, CL	A-4			0	95-100	90-100	85-100	  60-80	20-35	3-10
I	6-12	Silt loam, loam	CL-ML, CL, ML	A-4			0	95-100	90-100	85-100	60-80	20-40	3-16
		Silt loam, loam										20-40	
		Silt loam,   silty clay   loam, loam	CL, ML, CL-ML	A-4,	A-6		0 	95-100 	90-100 	85-100 	50-90 	20-40	3-16
	30-36 		CL, CL-ML, ML	A-4,	A-6		   0 	95-100	  90-100 	85-100	  50-90 	20-40	3-16
	36-65 	Loam, silt   loam, sandy	ML, CL-ML, CL	  A-6, 	A-4		   	  95-100 	  90-100 	  85-100 	  50-90 	20-35	3-10
Lobdell	İ	loam   	   	 			   		   		   		   
Holly	i I	 	 	 		 	 	 	 		 	i 	 
		I	I	į			 				I	į	į
Chagrin				I									

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragr	ments		rcentage sieve n			  Liquid	   Plas-
and soil name	   	 	Unified	AASHTO	>10  inches	3-10  inches	4	10	40	200	limit	ticity  index
	In	'	¦	-¦	Pct	Pct	' 	¦	¦	¦	Pct	¦
6:		Į.	1	I				ļ .		1		
Yeager	 	Sandy loam,   fine sandy   loam, loam,   loamy fine	SM, SC-SM   	A-2-4, A-4		   0	  95-100   	  95-100     	  60-90     	20-45   	0-25	NP-5     
	     	sand  Loamy fine   sand, fine   sandy loam,   sandy loam,	SC-SM, SM   	A-2-4, A-4		   0       	  95-100     	  75-100     	  55-80     	5-35   	0-20	  NP-4   
	10-19 	loam  Stratified   loamy sand,   stratified   loamy fine   sand,   stratified   sandy loam,   stratified   fine sandy   loam,   stratified	  SP-SM, SM                 	A-2-4, A-3			  95-100                 	  75-100                   	  55-80                 	   5-35                 	   0-20                 	  NP-4               
	19-53 	Stratified   loamy sand,   stratified   loamy fine   sand,   stratified   sandy loam,   stratified   fine sandy   loam,   stratified   fane,   stratified   sand	SM, SP-SM	A-2-4, A-3                 	             		   95-100                   	   75-100                   	55-80   1   1   1   1   1   1   1	5-35   	0-20	NP-4
	53-65                 	Stratified   loamy sand,   stratified   loamy fine   sand,   stratified   sandy loam,   stratified   fine sandy   loam,   stratified   sand	SM, SP-SM	A-2-4, A-3                 	               		   85-100                   	  40-100                     	40-80                     	20-75                   	0-20	NP-4                     

Table H.--Engineering Index Properties--Continued

Map symbol	   Donth		Classif:	ication	Fragi	ments			e passir umber		    Liquid	   Dlag
and soil name	Depth 	USDA texture	l	 	-    >10	I 3-10	 	steve III	uliber		limit	
	   		Unified	AASHTO		linches	4	10	40	200		index
	   In		 	   	Pct	Pct	! 	 	!	 	Pct	! 
Grigsby	 	 	 	 			 	 	 	 		 
Nolin	 			 		 		 	 	 		
7:					į		     05 100	,     05 100	100 100	,     70 0E		   2 1 E
Moshannon	9-26	Silt loam, loam  Silt loam,   loam, silty	CL, ML, CL-ML						90-100  90-100		20-35	3 <b>-</b> 15   3 <b>-</b> 15
		clay loam	 									 
		loam, silty	CL, ML, CL-ML	A-4, A-6 		0 	95-100 	90-100 	90-100 	80-95 	15-30 	3-10 
	37-65		  CL, ML, SC,   CL-ML	  A-2, A-4, A-6 	   	   0 	  80-100 	  70-100 	  65-95 	  50-85 	  15-25 	   3-10 
I		stratified   loam,	 	 		 	 	 	 	 	 	 
		stratified   loamy sand,	 	 		 	 	 	 	 		 
		fine sandy   loam, silt	 	  -	 	 	 	 	 	 	 	 
		loam	İ		į	į					į	
Chagrin	 		 	 			 	 		 		 
Nolin												
Melvin			 									
8:	 		 	 		 	 	 	 	 		 
Lobdell		Loam, silt loam									20-30	
		Loam, silt loam  Loam, silt	CL, ML, CL-ML  CL, ML, CL-ML								20-30  20-30	
		loam, silty   clay loam	CL, ML, CL-ML	A-4 			93-100				20-30	
	21-41	Loam, silt	CL, ML, CL-ML	A-4		0	90-100	80-100	70 <b>-</b> 95	  55 <b>-</b> 85	20-30	NP-8
		loam, silty   clay loam	 	 		 	 	 	 	 		 
		Silt loam,   sandy loam,   loam	CL, ML, CL-ML   	A-4   		0   	90-100   	80-100   	65-85   	40-80   	15-25   	NP-5   
Middlebury	 	 	 	 			 	 	 	 		 
Grigsby	 			 				 		 		
Orrville				 						 		 

Table H.--Engineering Index Properties--Continued

Map symbol	l Depth	   USDA texture	Classif	ication	Fragr	ments		rcentage	e passi	_	    Liquid	     Plas=
and soil name	l 		     Unified	   AASHTO	   >10  inches	3-10  inches	 	1 10	40	200	limit	
	   In	l	l 	l 	   Pct	   Pct	 	 	 	 	   Pct	
										l		
Chagrin	   	   	   	   	   	   	   	   	   	   		   
9C:	İ	į į	İ	ĺ	ĺ	İ	İ	İ	İ	ĺ	İ	İ
Allegheny		Loam, fine   sandy loam,   silt loam	ML, CL   	A-4, A-6   	   	0   	90-100   	80-100   	65-100   	55-95   	15-35 	NP-10 
İ	8-15 	Loam, fine   sandy loam,	CL, ML, SC,	A-4, A-6	 	,   0 	90-100 	80-100	  65-95 	  55-95 	15-35 	NP-10
	15-40 	loam, sandy	  CL, ML, SC,   SM	  A-4, A-6 	   	   0 	  90-100 	  80-100 	  65-95 	  60-95 	15-35	  NP-10 
	40-50   	_	  CL, ML, SM,   SC     	  A-2, A-4, A-6     	 	   0     	  65-100       	  55-100     	  35-95       	  20-75       	  15-35       	  NP-15       
	50-65   	•	  SM, ML, SC,   CL     	  A-2, A-4, A-6       	         	   0       	  65-100         	  55-100         	  35-95         	  20-75         	  15-35         	  NP-15         
Chavies	   0-12	  Fine sandy loam 	  CL-ML, SM,   ML, SC-SM	   A-4 	   0 	   0 	  85-100 	  75-100	  40-90	  40-75 	15-25	  NP-5 
		Fine sandy		A-4	0	0	85-100	75-100	65-100	45-85	15-35	NP-8
	43-70 	loam, loam  Fine sandy   loam, gravelly   fine sandy   loam, loam		A-1-b, A-2,   A-4 	     	   0-5   	  70-100     	  60-95     	  40-85     	  20-75     	  15-25     	  NP-5   
12:		 	 	 	 	 	 	 	 	 		
Chagrin		Loam, silt loam					•	•	80-100			NP-10
	12-39 	Loam, silt loam  Loam, silt   loam, silty   clay loam	CL, ML, CL-ML  CL-ML, ML, CL 		   				80-95  80-95 		20-35  20-35 	
	39-56 	Silt loam,   loam, silty	  CL-ML, ML, CL 	A-4, A-6	   	   0 	  95-100 	  85-100 	  80-95 	  70-90 	20-35	NP-15
	56-65 	clay loam  Silt loam, fine   sandy loam,   loam	  SM, CL, ML   	  A-2, A-4, A-6   	   	   0 	  95-100   	  85-100   	  80-95   	70-90   	20-35	  NP-15   

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	   USDA texture	Classif	ication	Fragi	ments		rcentage	e passinumber		    Liquid	   Plas-
and soil name	_ 	 	Unified	AASHTO	>10  inches	3-10  inches	   4	l 10	40	200	limit	ticity  index
	In	l	I	l	   Pct	   Pct	 	 	 	 	Pct	 
     Nolin		   	   			   	   	   	   	   		
  Grigsby						 	 	 	 	 		
Holly		 				 	 	 	 	 		
Lobdell		 				 	 	 	 	 		
Orrville						 	 	 	 	 		
13:     Nolin		    Loam, fine   sandy loam,	  CL, ML 	  A-4, A-6 		     0 	    90-100 	    80-100 	    65-100 	    55-95 	  15-35	    NP-10 
!	8-15	sandy loam,	  CL, ML, SC,   SM	  A-4, A-6	   	   0 	  90-100 	  80-100 	  65-95 	  55-95 	  15-35 	  NP-10 
	15-40	loam, sandy	CL, ML, SC,   SM	A-4, A-6		   0 	  90-100 	  80-100 	  65-95 	  60-95 	15-35	NP-10
	40-50	Sandy loam,   fine sandy   loam, loam,   sandy clay   loam, clay	1	A-2, A-4, A-6     	       	   0     	  65-100     	  55-100     	  35-95       	  20-75       	  15-35       	  NP-15       
       	50-65		  CL, SC, SM,   ML     	  A-2, A-4, A-6       	         	   0       	  65-100       	  55-100         	  35-95         	  20-75         	  15-35         	  NP-15         
  Chagrin		 				 	 	 	 	 		
Grigsby		 				 	 	 	 	 		
Lindside		 				 	 	 	 	 		
Newark		 				 	 	 	 	 		

Table H.--Engineering Index Properties--Continued

Man armbol	Don+h	   USDA texture	Classif	icatio	on	Frag	ments		_	e passi: umber	ng	  Liquid	   Dlag
Map symbol   and soil name	Depth	USDA Lexture	 	1		   >10	I 3-10	1	sieve n	umber		limit	
and soll hame		 	Unified	A2	ASHTO		inches	4	10	40	200	- 1	index
	In	! !	'			Pct	Pct	' 	' !	<u> </u>	' 	Pct	! !
14:			 	 				 	 	 	 		 
Holly	0-6	Loam, silt loam	ML	A-4		i	0	90-100	85-100	80-100	70-90	25-35	NP-10
-	6-35	Silt loam,	ML	A-4,	A-6		0	90-100	85-100	80-95	70-90	25-35	NP-10
İ		loam, sandy	ĺ	İ		İ	İ	İ	İ	j		İ	İ
		loam, silty				1					l		
1		clay loam											
ĺ	35-49	Silt loam,	ML, SM	A-4,	A-6, A-2	!	0	90-100	85-100	80-95	70-90	25-35	NP-10
		loam, sandy											
		loam											
	49-65		ML, SM	A-4	A-6, A-2	!	0	85-100	65-100	65-95	60-80	15-25	NP-10
		loam, silt											
		loam							[				
Orrville											 		
Melvin	0-9	  Silt loam	  CL-ML, ML, CL	  A-4			1 0	  95-100	  90-100	  80-100	I I80-95	  25-35	   4-10
	9-60	Silt loam,	CL, CL-ML	A-4,	A-6	i	. 0	95-100	90-100	80-100	80-98	125-40	5-20
		silty clay	ì	i		İ	İ	i İ	i	İ	I	İ	İ
		loam	ĺ	İ		İ	İ	İ	İ	İ		İ	İ
1	60-64	Silt loam,	CL-ML, CL	A-4,	A-6		0	85-100	80-100	70-100	60-98	25-40	5-20
ĺ		silty clay											
		loam, loam	1					[	ļ.		l	1	
Grigsby				 							 		 
  Chagrin				 							 		 
CIIGGLIII			! 	i I		1	1	! 	! 	 	! 	1	l I

Table H.--Engineering Index Properties--Continued

	   Depth	   USDA texture	Classif	ication	i	ments		_	e passinumber		    Liquid	
and soil name	    -	 	   Unified	   AASHTO	>10  inches	3-10  inches		10	40	200	limit 	ticity  index
	In		<u> </u>		Pct	Pct	' !	' !	' !	' 	Pct	' !
15:	 	 	l I	 	l	 	 	l I	 	 		 
Middlebury			SM, SC-SM,	A-2, A-4		,   0 	  80-100 	75-100 	50-100 	  40-90 	  25-35 	5-10
	7-12 	Loam, fine		A-2, A-4	 	0 	80-100 	75-100	50-95 	40-90 	25-35	5-10
	12-30	Loam, fine	CL-ML, ML,   SC-SM, SM	A-2, A-4 		   0 	  75-100 	  70-100 	50-95 	40-80 	25-35	5-10 
	30-43 	Fine sandy	CL-ML, SC-SM,   ML, SM	A-2, A-4 		0   	75-100   	70-100   	50-95   	40-80 	15-25   	2-6   
	43-52 	Sandy loam,   fine sandy   loam, loam,	ML, CL-ML,   SM, SC-SM	A-4, A-2 		     	  60-90   	  50-90   	35-90   	20 <b>-</b> 50	15-25   	2-6   
	52-65       	loamy sand  Gravelly loamy   sand, gravelly   sandy loam,   gravelly fine   sandy loam,   gravelly loam	GM     	  A-2, A-1   		         	  60-90       	  50-90         	  35-90         	  20-50       	0-15       	  NP-4       
Grigsby	 							 		 		
Lobdell								 		 		
Orrville	 							 				
Yeager	 											
Other Soils	   	   	   	   	 	   	   	   	   	   		   

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif	ication	Fragi	ments			e passi umber		  Liquid	   Plas-
and soil name	-   	 	   Unified	   AASHTO	>10  inches		   4	10	40		limit	ticity  index
	   In	 	   	   	Pct	Pct	! 	   	   		Pct	!
16A:	 	l Í	! 	! 		 		 		1	 	 
Cotaco	0-8	· ·	SC-SM, ML,   SM, CL-ML	A-4		0-5	80-100	75-95 	55-85 	35-80 	0-30	NP-10
	8-12 I	Loam, silt loam	ML, CL-ML,   SC-SM, SM	A-4		0-5	80-100	75-95 	55-85 	35-80 	0-30	NP-10
	 	Loam, clay		A-4, A-6   		0-5   	80-100     	75-95     	55-85   	35-80     	0-30	NP-10   
	 	Clay loam,   loam, sandy   clay loam,   silt loam	CL, GC, SC,   SM 	A-1-b, A-2,   A-4, A-6		0-6   	80-100     	75-95   	55-85   	35-80     	10-35     	5-15     
	28-39   		SM, GC, SC,   CL 	A-1-b, A-2,   A-4, A-6 		0-6   	60-100     	50-95       	40-90   	20-80     	10-35     	5-15     
	   	Loam, clay   loam, sandy   clay loam,   silt loam	SC, SM, CL,   GC 	A-1-b, A-2,   A-4, A-6 		0-10   	60-100     	50-95     	40-90   	20-80     	10-35     	NP-10   
	   	Channery loam,   channery clay   loam, channery   sandy clay   loam, channery   silt loam	SM   	A-1-b, A-2,   A-4, A-6   	       	0-10	60-100         	50-95           	40-90	20-80         	10-35         	NP-10         
Allegheny	 		 			 	 	 				 
Monongahela	   	   	   	   		   	   	   		 	 	 

Table H.--Engineering Index Properties--Continued

		1	Classi	fication	Fragr	ments			e passi			
Map symbol   and soil name	Depth	USDA texture		1	_    >10	3-10	:	sieve n	umber		Liquid  limit	
and soll name	   	 	   Unified	AASHTO	>10  inches		4	10	40	200		index
	'   In		' 	_!	Pct	Pct	'	' 	'	·	Pct	
16B:	 	! 	 			 	 	 		1		
Cotaco	0-8	Loam, silt loam	SM, SC-SM,   ML, CL-ML	A-4		0-5	80-100 	75-95 	55-85 	35-80 	0-30	NP-10
	8-12 	Loam, silt loam	SM, SC-SM,   ML, CL-ML	A-4		0-5 	80-100 	75-95 	55-85 	35-80 	0-30 	NP-10
	 	•	CL, GC, SC,   SM 	A-4, A-6   		0-5   	80-100   	75-95     	55-85     	35-80   	0-30   	NP-10     
	17-28   	Clay loam,	SM, SC, CL,   GC 	A-1-b, A-2,   A-4, A-6		0-6   	80-100   	  75-95   	55-85   	35-80	10-35	5-15   
	28-39 	Clay loam,		A-1-b, A-2,   A-4, A-6		0-6     	60-100     	  50-95     	140-90	20-80	10-35	5-15     
	 	Loam, clay   loam, sandy   clay loam,   silt loam		A-1-b, A-2,   A-4, A-6		0-10   	60-100     	50-95     	40-90   	20-80	10-35	NP-10     
		Channery loam,   channery clay   loam, channery   sandy clay   loam, channery   silt loam	SC   	A-1-b, A-2, A-4, A-6	       	0-10         	60-100           	50-95           	40-90         	20-80         	10-35         	NP-10           
Allegheny					ļ							
Monongahela	 		 									

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif 	ication		ments		rcentag sieve n			  Liquid	
and soil name	 	 	   Unified	   AASHTO	>10  inches		l	10	40	200	limit	ticity  index
	   In		 	 	Pct	   Pct	 				Pct	 
18: Skidmore	 	  Gravelly sandy   loam, gravelly   fine sandy	 	  A-2, A-4 		     0-10 	    60-90 	    40-85   	    40-75   	    25-60   	    10-30   	    NP-7   
	   10-22   	loam, gravelly   loam  Very gravelly   sandy loam,   very gravelly   fine sandy   loam, very	ļ	    A-2, A-4   	       	   5-30       	    35-60     	  20-50     	  15-40       	  10-35       	  10-30     	    NP-5     
	   22-30 	gravelly loam  Extremely   cobbly sandy   loam,		  A-1, A-2 		  30-50   	  35-60 	  20-50 	  15-40 	  10-35   	  10-20 	  NP-5 
	       30-65             	extremely   cobbly fine   sandy loam,   extremely   cobbly loam  Extremely   cobbly loamy   sand,   extremely   cobbly fine   sandy loam,   extremely   cobbly sandy   loam	      GM, GP-GM               	       	                     	       40-60               	      30-60               	 	      15-40             	      10-35               	       5-15             	         NP-5           
Chagrin	 		 I	 I			 					 
Other Soils	 		 	 		 	 					 
Sensabaugh												
Shelocta	   	   	   	   		   	   					   

Table H.--Engineering Index Properties--Continued

				Classif	icati	on		Fragi	ments			e passi	ng	1	
Map symbol	Depth	USDA texture	I					l		:	sieve n	umber		Liquid	
and soil name				- 161 1	! _			>10		!				limit	-
				Unified	A	ASHTO		linches	lnches	4	10	40	200		index
	 Tn	<u> </u>	!		¦			l	   Pct	<u> </u>	<u> </u>	<u> </u>	!	l Pct	!
	111		1		1			l ECC	l ECC	 	l I	 	l I	l ECC	 
21:			i		i			! 	! 	 	! 	 	! 		! 
Kanawha	0-6	Loam, fine	ML,	CL-ML, CL	A-4				0	80-100	75 <b>-</b> 100	65-100	50 <b>-</b> 90	20-35	2-10
į		sandy loam,	İ		İ			İ	İ	İ	ĺ	j		j	
		silt loam			1										
		Silt loam, loam												20-35	
ļ				SM, SC,	A-4,	A-6			0	80-100	75-100	65-100	50-90	20-40	3-15
		1	ML		!								  -		!
		loam  Silt loam,	I CT	ML, SC,	17-4	7 – 6			I 0	100_100	  75_100	165_100	  50_00	120-35	   2_15
			I SM		A-4,	A-0			1	100-100	1/3-100	102-100	1 20-90	120-33	1 2-12
		loam	I DIM		i			 	 	 	 	 	 	1	! 
			CL.	ML, SM,	A-2,	A-4,	A-6	' 	1 0	80-100	75-100	165-95	150-85	120-35	2-10
		·	SC		į ´	,		i İ	İ		İ				İ
į			İ		İ			İ	İ	İ		İ		İ	
Urban Land					1										
					1								l		
Other Soils			!		1										
Melvin			1										 		
MetAll			1		1								 		 
21A:			i		i			! 	! 	 	! 	 	! 		! 
Kanawha	0-6	Loam, fine	CL,	ML, CL-ML	A-4				0	80-100	75 <b>-</b> 100	65-100	50 <b>-</b> 90	20-35	2-10
į		sandy loam,	İ	•	İ			İ	İ	İ	ĺ	j		j	
		silt loam			1										
		Silt loam, loam												20-35	
				SC, ML,	A-4,	A-6			0	80-100	75-100	65-100	50-90	20-40	3-15
		1	CL		!								<u> </u>		!
		loam		GT	13 4	3 C		 	I 0	100 100		100		120-35	2 1
			SM,	CL, SC,	A-4,	A-6			0	180-100	1/5-100	102-100	150-90	120-35	1 3-12
		loam	I MTP		i			 	 	 	l I	 	l I	1	l I
		•	CL	ML, SM,	IA-2.	A-4.	A-6	' 	1 0	180-100	175 <b>-</b> 100	165-95	150-85	120-35	1 2-10
			SC			,		i	i						. – – - I
į			İ		İ			İ	İ	İ		İ		İ	
Gallipolis					1										
					1								l		l
Cotaco			!		1										
Nolin			1		1			I I	I I	I I	I I	I I	l 	1	l 
MOTTII			1		1			 			 		ı ——— I		ı ——— I
Nelse			i		i										
			i		i			i İ	I	İ	I	İ	I	i	I

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	   USDA texture	Classif:	ication	Fragi	ments		rcentage sieve n	e passinumber	ng	  Liquid	   Plas-
and soil name	-	 	Unified	   AASHTO	>10  inches	3-10  inches	   4	1 10	40	200		ticity  index
		l	l l	l I	   Pct	   Pct	 	! !	 	l I	   Pct	 
į		İ	I	l	İ	İ	İ	İ	i i	İ	İ	i
21B:	0 6											
Kanawha   		Loam, fine   sandy loam,   silt loam	ML, CL-ML, CL   	A-4   		0   	    80-100	/5-100   	65-100   	50-90   	20-35   	2-10
	6-10	Silt loam, loam	CL, ML, CL-ML	A-4		0	80-100	75-100	65-100	50-90	20-35	3-15
			ML, CL, SM,   SC 	A-4, A-6   		0   	80-100   	75-100   	65-100   	50-90   	20-40 	3-15
	58-66	Silt loam,   loam, clay	ML, CL, SC,   SM	A-4, A-6	i	,   0 	80-100	75-100	65-100	  50-90 	20-35	3-15
 			  SC, SM, CL,   ML	  A-2, A-4, A-6 	i	   0 	  80-100 	  75-100 	  65-95 	  50-85 	20-35	2-10
  Gallipolis		 	   	   		   	   	   	   	   		
Elk			'   	 			 	 		'   	 	
Monongahela		 !	   	 	i		 	 		 	i	
Nelse		 !	 	 	i		 	 		 	i	i
Cotaco			 I	 	i		 	 		 	i	i
24B:		Ī	i I	I	i	İ	I	İ	İ	I	İ	İ
Allegheny		Loam, fine   sandy loam,   silt loam	CL, ML   	A-4, A-6   		0   	90-100 	80-100   	65-100   	55 <b>-</b> 95   	15-35 	NP-10 
	8-15	Loam, fine	SM, SC, ML,   CL	A-4, A-6		0	90-100	  80-100 	  65-95 	  55 <b>-</b> 95 	15-35	NP-10
ļ	15-40	Loam, clay  loam, sandy	ML	A-4, A-6		   0 	90-100	  80-100 	  65-95 	  60-95 	15-35	NP-10
	40-50	Sandy loam,	  ML, SC, SM,   CL	  A-2, A-4, A-6 	    	   0 	  65-100 	  55-100 	  35-95 	  20 <b>-</b> 75 	  15-35 	  NP-15 
 	50-65	•	  -  -  SC, ML, SM,	 		         0	        65-100	        55-100	        35-95	        20-75	        15-35	        NP-15
 		fine sandy   loam, loam,   sandy clay   loam, clay   loam	CL       	 		         	         	         	         	         	         	         

Table H.--Engineering Index Properties--Continued

Map symbol	l Depth	   USDA texture	Classif	ication	Fragr	ments		rcentage	e passinumber		  Liquid	     Plas-
and soil name		I I	   Unified	   AASHTO		3-10  inches	4	10	40		limit	
	<u> </u>	<u> </u>	ļ	ļ	<u></u>	<u> </u>	!	ļ	!	!	ļ	<u> </u>
	In	1	 		Pct	Pct	 	 	 	 	Pct	 
Chavies	0-12	Fine sandy loam 	SC-SM, CL-ML,   ML, SM	A-4 	   0 	   0 	  85-100 	  75-100 	  40-90 	  40-75 	15-25	  NP-5 
				A-4	0 	0 	  85-100 	75-100 	65-100 	45-85 	15-35 	NP-8 
	 	Fine sandy   loam, gravelly   fine sandy   loam, loam		A-1-b, A-2,   A-4 	     	0-5     	70-100     	60-95     	40-85     	20-75     	15-25     	NP-5     
24C:	! 	i I	! 	1	! 	 	! 	! 	! 	! 		! 
Allegheny	İ	sandy loam,	ML, CL 	A-4, A-6	 	0 	90 <b>-</b> 100	80-100 	65-100 	55 <b>-</b> 95	15-35 	NP-10 
	8-15		  CL, ML, SC,   SM	  A-4, A-6 	   	   0 	  90-100 	  80-100 	  65-95 	  55-95 	  15-35 	  NP-10 
	15-40	Loam, clay	CL, ML, SC,	A-4, A-6	   	   0 	  90-100 	  80-100 	  65-95 	  60-95 	15-35	  NP-10 
	40-50   	Sandy loam,	CL, ML, SM,   SC   	A-2, A-4, A-6	       	   0     	  65-100     	  55-100       	  35-95       	  20-75     	15-35       	  NP-15     
	50-65 	Sandy loam,	SM, ML, SC,   CL         	A-2, A-4, A-6       	       	0       	  65-100       	  55-100       	  35-95       	  20-75     	15-35         	  NP-15     
Chavies	   0-12 	Fine sandy loam	  CL-ML, SM,   ML, SC-SM	   A-4 	   0 	I   0 	  85-100 	  75-100 	  40-90 	  40-75 	  15-25 	  NP-5 
				A-4	0	0 	85-100 	75-100 	65-100 	45 <b>-</b> 85 	15-35 	NP-8
	43-70			A-1-b, A-2,   A-4 	<b></b>     	0-5     	70-100       	60-95       	40-85       	20-75     	15-25       	NP-5   

Table H.--Engineering Index Properties--Continued

		<u> </u>	Classif	icatio	n	F:	ragm	ents	Pei	rcentag	e passii	ng		
Map symbol	Depth	USDA texture				I					umber	_	Liquid	
and soil name		1						3-10	l				limit	-
	 		Unified	AA	SHTO	inc	hes	inches	4	10	40	200		index
	   In	'	 	¦		_	'. t	Pct		 		 	   Pct	'
		İ	İ	İ		i	i	Ì		I	İ	İ	İ	İ
27C:		L								l	1	l	1	1
Latham		Silt loam,   silty clay   loam	CL, ML, CL-ML   	A-4, ]   	A-6		-	0-2	85-100   	75-100   	70-100   	65-90   	20-35   	5-12   
		silty clay	CL-ML, ML, CL	A-4,	A-6		- į	0-2	85-100	75-100	70-100 	65-90	20-35 	5-12
	8-28 	loam, silty	  CL, ML, CH 	  A-6, 1	A-7		-   -	0-2	  85-100 	  75-100 	  70-100 	  65-90 	30-65	  10-40 
	28-33 	silty clay	  CL, CH 	  A-7 			-    -	0-4	  85-100 	  70-95 	  65-95 	  60-90 	30-65	  25-40 
	33-36 	loam  Silty clay,   silty clay   loam	  CH, CL 	  A-7 			-	0-5	  85 <b>-</b> 100	  70-95 	  65-95 	  60-90 	30-65	  25-40 
	   36-44	•	 	 			-			 		 		
Gilpin	   0-2	 	 	 			-   -		 	 	 	 		 
	2-3	1					-							
	•			A-4,				-			70-85		20-40	
	İ	Channery silt   loam, channery   loam		A-4, 1	A-6, A-	-2	-	0-5	50-90 	45-85   	35-75 	30-70   	20-40	5-15 
	9-16   	Channery silt   loam, channery   loam, channery   clay loam,	SC, GC   	A-4,     	A-6, A-	-2	-       	0-5	50-90 	  45-85     	35-75     	30-70   	20-40	5-15   
	   16-22	channery silty   clay loam  Channery silty   clay loam,		    A-6,	A-4, A-	-2	  - 	0-5	    50-95 	    45-90 	    35-75 	    30-65 	    20-40 	     5-15 
	       22-28 	channery clay   loam, channery   silt loam,   channery loam  Channery silty   clay loam,   channery loam,   channery clay	      CL, CL-ML,   SC, GC	        A-2, 1	A-4, A-	      -6	         	0-10	       50-95 	         45-90   	        35-75   	         30-65   	       20-40	         5-15   
		loam, channery   silt loam 		    A-2,	A-4, A-	  -6	-    -		   	   	 	   	 	   
Cavode	   	   	   	[ 			-    -		   	   <b></b> 	   	   		   

Table H.--Engineering Index Properties--Continued

·		<u> </u>		Classif	icati	on		Fragr	nents	l Pe:	rcentag	e passii	ng	Ī	
Map symbol	Depth	USDA texture	l					I				umber	_	Liquid	
and soil name		I						>10		l				limit	-
	 		[	Jnified	l A.	ASHTO		linches	linches	4	10	40	200		index
	   In	' <u></u> -	<u> </u>	<del></del>	' 			l	Pct	'	'		 	Pct	\
j		İ	i		İ			İ		İ	İ	i	I	İ	i
27D:		L							Ι	l	l	1	l	1	1
Latham		Silt loam,   silty clay   loam	CL,   	CL-ML, ML	A-4,   	A-6		   	0-2 	85-100   	75-100   	70-100   	65-90   	20-35   	5-12   
		silty clay	CL,	CL-ML, ML	A-4,	A-6		 	0-2	85-100 	75-100	70-100 	65 <b>-</b> 90	20-35	5-12
	8-28 	loam  Silty clay   loam, silty   clay	  CH, 	CL, ML	  A-6, 	A-7		   	0-2	  85-100 	  75-100 	  70 <b>-</b> 100 	  65-90 	30-65	  10-40 
	28-33	· •	  CH, 	CL	   A-7 			   	0-4	  85-100 	  70-95 	  65-95 	  60-90 	30-65	  25-40 
	33-36 	· ·	CL,	СН	  A-7 			   	0-5	  85-100 	  70-95 	  65-95 	  60-90 	30-65	  25-40 
	36-44	•													
Gilpin	   0-2   2-3		 		   			 	 	 	 	 	 		 
		Silt loam	ICL,	CL-ML	  A-4,	A-6			I 0	1 180-95	1 175-90	170-85	ı 165-80	120-40	   5-15
	6-9 	Channery silt   loam, channery   loam	CL-M	ML, GC,		A-6,	A-2	 	0-5	50-90 	45-85 	35-75 	30-70	20-40	5-15 
	9-16   	Channery silt   loam, channery   loam, channery   clay loam,	SC,   		A-4,   	A-6,	A-2	   	0-5	  50-90   	45-85     	35-75     	30-70   	20-40	5-15     
	   16-22 	channery silty   clay loam  Channery silty   clay loam,   channery clay	  SC,   CL-		    A-6, 	A-4,	A-2	     	     0-5 	    50-95   	    45-90 	    35-75 	    30-65 	  20-40 	     5-15 
	 	loam, channery   silt loam,   channery loam  Channery silty	      CL,   CL-		       A-2,   	A-4,	A-6	         	     0-10 	      50-95   	      45-90   	      35-75   	       30–65   	1 20-40	       5-15   
		loam, channery   silt loam 	 	CL, ML,	    A-2,	A-4,	A-6	   	   	     	     	     	   	   	     
  Cavode	   	 	 		   			   	   	   	   	   	   		   

Table H.--Engineering Index Properties--Continued

		!	Classif	ication	Fragi	ments			e passi	ng		ļ
Map symbol   and soil name	Depth	USDA texture	<u> </u>		>10	I 3-10	5	sieve n	umber		Liquid  limit	
and soil name			Unified	AASHTO	inches		4	10	40	200	- 1	index
	———	 		 	   Pct	   Pct		 	 	 	   Pct	! !
  Wharton		 				 	 	 	 	 		
Lily		 				 	 	 				
Coolville		 	 			 	 	 	 	 		
29D:	0.0	 				 	    -	    -	 	 		 
Lily    	2-8	fine sandy	  SM 	A-2, A-4		   0-5 	  90-100 	  85-100 	  55-80 	  25-50 	0-20	  NP-4 
 	8-12	loam, fine	  SM 	  A-2, A-4 	   	   0-5 	  90-100 	  85-100 	  55-80 	  25-50 	   0-20 	  NP-4 
 	12-16	loam, fine	  SM 	  A-2, A-4 	   	   0-5 	  90-100 	  85-100 	  55-80 	  25-50 	   0-20 	  NP-4 
 	16-26	loam, sandy	  CL, SM, SC,   ML	  A-4, A-6 	   	   0-5 	  90-100 	  85-100 	  55-80 	  25-50 	  10-25 	  NP-10 
 	26-32	clay loam,	  SM, SC, ML,   CL	  A-4, A-6 	   	   0-5 	  90-100 	  85-100 	  75-100 	  40-80 	  10-25 	   5-15 
	32-38		  ML, SC, CL,   SM   	  A-2, A-4, A-6   	       	   0-5     	  90-95     	  85-95     	  55-75     	  25-50     	   0-20   	  NP-10     
İ			 			 	 					
Marrowbone			 			 	 					
Matewan			 			 	 	 	 	 		 
Muskingum		 	 			   	 	   	   	 		 
Ramsey		 !	 			 						
Udorthents			   			 		 				
Gilpin											ļ	

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragi	ments		rcentag sieve n	e passi: umber	ng	  Liquid	   Plas-
and soil name	l Sobon		·	1	>10	I 3-10	, 	010.0 11	u 0 1		limit	
and boll name	İ	İ	Unified	AASHTO		inches	4	10	40	200	- '	index
	l	l	_		l	l	l	l	l	l	_ I	l
	In		1	Ţ	Pct	Pct	ļ	ļ	ļ .	ļ	Pct	
29E:	 				 	 	 	 	 	l I	1	1
Lily	I 0-2	i	i	i	i						i	i
4	2-8	Sandy loam,	SM	A-2, A-4	i	I 0-5	90-100	85 <b>-</b> 100	55 <b>-</b> 80	25 <b>-</b> 50	0-20	NP-4
	İ	fine sandy	i	i	i İ	İ	i İ	i İ	i İ	i İ	i	i
	I	loam, loam	i	i	i İ	I	i İ	İ	i İ	İ	i	i
	8-12	Sandy loam,	SM	A-2, A-4		0-5	90-100	85-100	55-80	25-50	0-20	NP-4
	İ	loam, fine	İ	İ	İ	İ	İ		İ	İ	İ	İ
		sandy loam	İ	İ	İ	İ	İ		İ	l	İ	İ
	12-16	Loam, sandy	SM	A-2, A-4		0-5	90-100	85-100	55-80	25-50	0-20	NP-4
		loam, fine									1	
	I	sandy loam	1								1	
	16-26	Clay loam,	SC, SM, ML,	A-4, A-6		0-5	90-100	85-100	55-80	25-50	10-25	NP-10
		loam, sandy	CL									
	l	clay loam	1								1	
	26-32		CL, ML, SC,	A-4, A-6		0-5	90-100	85-100	75-100	40-80	10-25	5-15
		clay loam,	SM									
		clay loam										
	32-38	Sandy loam,		A-2, A-4, A-6		0-5	90-95	85-95	55-75	25-50	0-20	NP-10
		fine sandy	SM									
	l	loam, loam,									1	
		sandy clay										
	l	loam									1	
Marrowbone												
Matewan												

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragr	ments	Pe	ercentag sieve n			  Liquid	   Plas-
and soil name	İ	İ			>10	3-10	Ì				llimit	ticity
	 	İ	Unified	AASHTO	inches	inches	4	10	40	200	 	index
	In	·	'	_	Pct	Pct		'	¦	i	Pct	' 
29F:	 					 	1			1		
Sharpcrest	0-1	İ						i	i	i		
Sharporoso	1-2	İ						i	i	i		
	2-4	Sandy loam,	SC-SM, GM,	A-1-b, A-2,		0-5	160-95	155-90	145-80	120-50	115-25	2-10
	. – - I	· •	SC, SM	A-4	i			1	1	1		, I
	' 	loam, loam			ì	i i	i	i	i	i	i	i
	4-7		GM, SC-SM,	A-2-4, A-1-b,	i	0-5	60-95	55 <b>-</b> 90	145-80	120-50	15-25	2-10
	I	-	SC, SM	A-4	İ	i	İ	i	i	i	i	i
	İ	sandy loam		İ	İ	İ	İ	İ	İ	İ	İ	İ
	7-13	Sandy loam,	SC-SM, GM,	A-1-b, A-2-4,		0-10	60-95	55-90	45-80	20-50	15-25	2-10
		loam, fine	SC, SM	A-4				1	1	1	1	
		sandy loam,						1			1	
		loamy sand										
	13-32	Sandy loam,	GM, SM, SC,	A-1-b, A-2-4,		0-10	50-95	50-90	40-80	20-50	15-25	2-10
			SC-SM	A-4				1				
		loam, loam,										
	l	loamy sand										
	32-39	Channery sandy		A-2-4, A-4		5-15	35-80	50-90	40-80	25-40	15-25	2-10
		loam, channery	GM, SM									
		fine sandy										
		loam, channery			!	!			1	1	!	!
		loam, channery						1		1	1	
		loamy sand					105.00	105 55	105.65	105 40	115 00	1 1 6
	39-48	Channery loamy		A-4, A-2		5-15	35-80	35-75	25-65	25-40	15-30	1-6
		sand, channery	GM, SC					1		1		
	 	sandy loam,   channery loam,			1	1	1	1	1	1	1	1
	 	channery fine		l I	1	1	1	1	1	1	1	1
	I I	sandy loam	1	1	1	I I	1	1	1	1	1	I I
	I 48-52		1	I		 						
	, 30 JZ		1		1	i I	İ	İ	İ	i	1	! 

Table H.--Engineering Index Properties--Continued

	   Depth	   USDA texture	Classi:  _	fication	I	ments			e passi umber	-	  Liquid	
and soil name			   Unified	   AASHTO	>10  inches	3-10  inches	4	10	40	200	limit 	ticity  index
	In		\ 	-	Pct	Pct	! !	 	! !		Pct	
Hazleton	1-2	  Sandy loam,   loam, fine   sandy loam	    ML 	  A-4	   	     0-5 	    90-100 	    90-100 	    75-90 	  60-70 		    NP-10 
	2-5	•	ML	A-4		0-10	  85-95	  85-95	75-90	160-70	0-20	NP-10
	5-13   	Channery sandy   loam, channery   loam, channery   loamy sand	ĺ	A-2, A-4	     	  10-20   	  60-85   	  60-80   	  60-75   	35-55   	15-25   	NP-10   
	13-23   	Channery sandy   loam, channery   loam, channery   loamy sand		A-2, A-4	     	10-20   	  60-85   	  60-80   	60-75   	35-55   	15-25   	NP-10   
	23-41	Very channery   sandy loam,   very channery   loam, very   channery loamy   sand	 	A-1, A-2, A-4	         	30-55         	55-80         	45-90         	35-70         	20-55         	15-25         	NP-6         
	         	Extremely   channery sandy   loam,   extremely   channery fine   sandy loam,   extremely   channery loamy   sand	SM         	A-1, A-2, A-4	             	40-60             	55-80             	35-75             	25-65             	15-50             	15-25             	NP-6               
	46-50		 									
Marrowbone			 					 				
Gilpin								 				
Matewan		 	   			 	   	   				

Table H.--Engineering Index Properties--Continued

and soil name			·						:	sieve n	umber			Plas-
							>10		!					ticity
	 		Unified	A2	ASHTO		inches	linches	4	10	40	200		index
	'   In	'	' 	 			Pct	   Pct	'	'	<u> </u>		Pct	<u> </u>
İ		İ	i İ	İ					İ	İ	į	i I	İ	į
31C:	l	1										l		
Gilpin	0-2													
	2-3   3-6	  Silt loam	  CL, CL-ML	  A-4,	7 – 6			I	  80-95	  75-90	  70-85	  65-80	120-40	
		Channery silt		A-4,		A-2			•	145-85			120-40	I 5-15
ļ	İ	loam, channery			11 0,	11 2		   	   	   				
	9-16	Channery silt		A-4,	A-6,	A-2		0-5	50-90	  45 <b>-</b> 85	35-75	30-70	20-40	5-15
ļ		loam, channery		1							1	l	1	
		loam, channery												
		clay loam,   channery silty	 	l I				 	 	 	1	 	1	1
		clay loam		İ				! 	! 	! 		! 	İ	i
	16-22	Channery silty	CL-ML, GC,	A-6,	A-4,	A-2		0-5	50 <b>-</b> 95	45 <b>-</b> 90	35-75	30-65	20-40	5-15
ļ		•	SC, CL	1							1	l	1	1
		channery clay		!										
		loam, channery   silt loam,	 	1				 	 	 	 	l I	1	
		channery loam	! 					 	 	 	 	 		
		Channery silty		A-2,	A-4,	A-6		0-10	50-95	45-90	35-75	30-65	20-40	5-15
!			ML, CL							l				
!		channery loam,		1							1		1	
		channery clay												
		loam, channery   silt loam	 	1				 	 	 	 	l I	1	1
	l 28-33	•	SM, CL, SC,	A-2,	A-4,	A-6		' 	 	 				
ļ		•	ML	į ,	,			İ	İ	İ	į		į	į
Upshur	0-1	I I	 					 	 	 		 		
	•		CL, CL-ML, ML					l 0 I 0			85-100		125-40	5-15   5-15
			CL-ML, ML, CL  MH, ML, CL	A-4,  A-7	A-0						85 <b>-</b> 100  85 <b>-</b> 100		125-40	
			MII, MII, CII	A /				l 0	1	JJ 100	100 100	00 ±00	145 70	120 40
		· •	CL, MH, CH	A-7			i	0	95-100	95 <b>-</b> 100	85-100	80-100	45-70	20-40
!	•	clay	l	1					l	l		l		
ļ		Channery silty		A-7					95-100	65-100	60-100	60-90	45-70	20-40
		clay, channery												
		clay  Channery silt	ICT. MH CH	  A-7				I I 0	   80=100	I I 65-100	  60-100	   60-90	1 145-70	120-40
 		loam, channery		1 4 1				, 0 I	, 55 ±00	, 55 ±00	100 100	00 00	1 3 70	120 40
		silty clay					i				I		İ	İ
İ		loam, channery	I				İ	l	l	I		l		
ļ		silty clay,	<u> </u>					l	<u> </u>	l	1		1	!
ļ		channery clay,												
		channery clay   loam	 	 				 	 	l I	 	 	1	1
	47-51	•		İ									i	i

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif	ication		Fragr	ments			e passi umber		  Liquid	   Plas-
and soil name	_ 	 	   Unified	   AASHTC	)	>10  inches	3-10  inches		10	1 40	200	limit	ticity  index
	<u> </u>	!	!	-!		<u> </u>	!	!	!	!	!	<u> </u>	!
	In 	I 	 			Pct 	Pct 					Pct 	 
Latham	 					 	 						
Other Soils													
31D:	 		 			 	 	1					 
Gilpin		I	I	1									
	2-3												
		· ·		A-4, A-6	3 0			,	1	170-85	,	1	5-15   5-15
		Channery silt   loam, channery   loam		A-4, A-6,	A-2	   	U=5 	50-90	45-85	35-75   	30-70	20-40	     2-13
	9-16     	Channery silt   loam, channery   loam, channery   clay loam,   channery silty	ML, CL   	A-4, A-6,	A-2	       	0-5       	50-90       	45-85     	35-75     	30-70       	20-40	5-15       
	16-22     	clay loam  Channery silty   clay loam,   channery clay   loam, channery   silt loam,   channery loam	SC, GC   	  A-6, A-4,   	A-2	       	   0-5     	  50-95       	  45-90     	  35-75       	  30-65     	  20-40     	   5-15       
	22-28       	Channery loam   Channery silty   clay loam,   channery loam,   channery clay   loam, channery   silt loam	CL, CL-ML,   SC, GC 	A-2, A-4,     	A-6	         	   0-10       	  50-95         	45-90         	  35-75       	  30-65         	120-40	   5-15         
	28-33 		SM, ML, SC,   CL	A-2, A-4,	A-6	   	     	   					   

Table H.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments		_	e passin	_		
Map symbol and soil name	Depth	USDA texture	<u> </u>			I 3-10	:	sieve n	umber		Liquid	
and soll name	 		Unified	AASHTO		3-10  inches	4	10	40	200	limit 	ticity  index
	   In	!	 	!	l	Pct	! !	! !	!	 	Pct	! !
Upshur	   0-1					 				 		 
	1-4	Silt loam	CL-ML, CL, ML	A-4, A-6		0	95-100	95-100	85-100	65-90	25-40	5-15
	4-8	Silt loam	CL, CL-ML, ML	A-4, A-6		0	95-100	95-100	85-100	65-90	25-40	5-15
	8-24	Silty clay,	CL, MH, ML	A-7		0	95-100	95-100	85-100	80-100	45-70	20-40
		clay										
	24-32	Silty clay,	MH, CL, CH	A-7		0	95-100	95-100	85-100	80-100	45-70	20-40
		clay			1							
	32-41	Channery silty		A-7			95-100	65-100	60-100	60-90	45-70	20-40
		clay, channery										
		clay			I							
	41-47		CH, MH, CL	A-7		0	80-100	65-100	60-100	60-90	45-70	20-40
		loam, channery										
		silty clay			!							
		loam, channery			ļ							
		silty clay,			l							
		channery clay,			1		1	1				1
	 	channery clay			l I	 	1	1		 	1	1
	I I 47-51	LOalli	1	I I		 		 		 		 
	4/-2I		1	1		 			 	 		
Latham												
Other Soils	 					 		 		 		 

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif	icatio	on		i	ments		_	e passi: umber	-	  Liquid	
and soil name	 	 	   Unified 	   AA	ASHTO		>10    inches  		   4 	I 10	40	1 200	limit   	ticity  index 
	In	' 	' 	i			Pct	Pct	' 	' 	'	' 	Pct	
31E:												ļ.		
Gilpin	I I 0-2	l I	 	1			 	 	 	 		 		
0115111	2-3	i	İ	i										i
				A-4,				0					20-40	5-15
		Channery silt   loam, channery   loam		A-4,	A-6,	A-2		0 <b>-</b> 5	50-90 	45-85 	35-75 	30-70 	20-40	5-15
	9-16 	Channery silt   loam, channery   loam, channery   clay loam,	GC, CL	A-4,   	A-6,	A-2	 	0-5     	  50-90   	  45-85     	35-75     	  30-70     	20-40   	5-15     
		channery silty   clay loam	I	i I				 	 	 		 		i I
	 	Channery silty   clay loam,   channery clay   loam, channery	SC, GC 	A-6,     	A-4,	A-2	 	0-5     	50-95     	45-90     	35-75     	30-65     	20-40   	5-15     
	   22-28 	silt loam,   channery loam  Channery silty   clay loam,   channery loam,   channery clay	CL, GC, SC,   CL-ML	  A-2,   	A-4,	A-6		     0-10   	    50-95   	    45-90   	    35-75     	    30-65   	   20-40   	   5-15   
			    SM, CL, SC,   ML	    A-2,	A-4,	A-6		     	     	     	     	     	     	   
Upshur	l ∣ 0−1	 	 	1			 	   ===	 	 		 		
oponar		Silt loam	ML, CL-ML, CL	A-4,	A-6		 	0	95-100	95-100	85-100	  65-90	25-40	5-15
	4-8	Silt loam	CL-ML, CL, ML	A-4,	A-6		i i	0	95-100	95-100	85-100	65-90	25-40	5-15
			CL, MH, ML	A-7				0	95-100	95-100	85-100	80-100	45-70	20-40
	24-32	clay  Silty clay,   clay	  CH, CL, MH	  A-7			 	   0	  95-100	  95-100	  85-100	  80-100	  45-70	20-40
	32-41	Channery silty   clay, channery		A-7 			 	   	  95 <b>-</b> 100 	  65-100 	60-100 	  60-90 	45-70 	20-40
	41-47	clay  Channery silt   loam, channery   silty clay   loam, channery	i I	  A-7   			 	   0   	  80-100   	  65-100     	  60-100     	  60-90     	  45-70     	  20-40   
	 	silty clay,   channery clay,   channery clay		     			     	     	     	     	     	       	     	     
	47-51		İ	İ			i i						·	i

Table H.--Engineering Index Properties--Continued

		1	Classif	fication	Frag	ments	l Pe	rcentag	e passi	ng	Ī	Ī
Map symbol	Depth	USDA texture	l		l			sieve n	umber		Liquid	
and soil name						3-10	!				limit	-
	 	 	Unified	AASHTO	inches	inches	4	10	40	200		index
·	   In		'	<u>'</u>	Pct	Pct		<u>'</u>	i	i	Pct	'
	 	 	 		 	 				1		 
Other Soils												
31F:	 		l I									
Gilpin	0-2   2-3		1									
		Silt loam	CL, CL-ML	A-4. A-6		1 0	180-95	175-90	170-85	165-80	120-40	5-15
		Channery silt			i			145-85				5-15
	ĺ	loam, channery			 	 	 	į į	i I	i I	į į	 
	9-16       	Channery silt   loam, channery   loam, channery   loam, channery   clay loam,   channery silty   clay loam	CL-ML   	A-4, A-6, A-2     	         	0-5       	50-90       	45-85     	35-75       	30-70       	20-40     	5-15       
	16-22   	Channery silty   clay loam,   channery clay   loam, channery   silt loam,   channery loam	GC, SC   	A-6, A-4, A-2       	         	   0-5       	  50-95         	45-90       	35-75         	30-65         	20-40	   5-15         
	 	Channery silty   clay loam,   channery loam,   channery clay   loam, channery   silt loam	CL-ML	A-2, A-4, A-6	         	0-10       	50-95         	45-90       	35-75         	30-65         	120-40	5-15         
	28-33 		SM, CL, SC,   ML	A-2, A-4, A-6	 	 						 
	l		I	I		I			1	1	1	1

Table H.--Engineering Index Properties--Continued

		I		Classif	ication		Fragr	nents			e passi			
Map symbol	Depth	USDA texture	l				l		5	sieve n	ımber		Liquid	
and soil name							>10	3-10					limit	-
				Unified	AAS	HTO	inches	inches	4	10	40	200	 	index
	In	<u> </u>	¦		! !		Pct	Pct	! !		! 	'   !	Pct	! !
  Upshur	0-1	1	1		 			 	 	 	 	 	 	
į	1-4	Silt loam	CL,	CL-ML, ML	A-4, A	-6		0	95-100	95-100	85-100	65-90	25-40	5-15
i	4-8	Silt loam	CL,	CL-ML, ML	A-4, A	-6		0	95-100	95-100	85-100	65-90	25-40	5-15
i	8-24				A-7			I 0	95-100	95-100	85 <b>-</b> 100	80-100	45 <b>-</b> 70	120-40
i		clay	i í	,	i I		i	I	1			i	İ	i
i	24-32		ICL,	CH, MH	IA-7		i	I 0	95-100	95-100	85-100	80-100	45-70	120-40
i		clav	i	,	i		i		İ			İ	İ	i
i	32-41	Channery silty	CH.	CL, MH	IA-7		i		95-100	65-100	60-100	60-90	45-70	120-40
i		clay, channery		,	i		i	I	İ			i	İ	i
i		clav	i		i		i	I	i	I	I	I	İ	i
i	41-47	Channery silt	I CH.	CI. MH	IA-7			I 0	80-100	65-100	60-100	160-90	145-70	120-40
i	,	loam, channery		02, 1111				l	1	1	1	1	1	1
i		silty clay	i		i			' 	i I	' 	' 	i I	' 	i i
i		loam, channery	i		i		i	' 	' 	' 	' 	i I	i I	i
i		silty clay,	i		i		i	' 	' 	' 	' 	i I	i I	i
i		channery clay,	i		i			' 	i I	' 	' 	i I	' 	i i
i		channery clay	i		i		i	' 	' 	' 	' 		' 	i i
i		loam	i		i			' 	i I	' 	' 	i I	' 	i i
· ·	47-51	Tourn	i		! 		i	' 	' 	' 	' 	' 	' 	i
· ·	17 01		i		! 			! 	! 	! 	! 	! 	! 	! 
Ravne			i					' 	' 	' 	' 		 	
1.0-7-1-0			i		i		i	' 	' 	' 	' 	i I	i I	i
Peabody		i	i		i		i		i					i
Other Soils			1		 			 	 	 	 	 	 	
			i		i i			' 	İ	' 	' 			

Table H.--Engineering Index Properties--Continued

and soil name	In	 	Unified	1										Plas-
325.	———In		I IInifiad				>10	3-10	I				limit	ticity
320.	In		, unitied	į A	ASHTO		inches	inches	4	10	40	200		lindex
325.		'	 	-			   Pct	   Pct	 	 	 	¦	   Pct	
		1								I		I		
Gilpin	0-2	1	l I	- 1			 	 	 	 				
GIIPIII	2-3	1	 	-			 	 	l I	 	l			
ſ		Silt loam	CL-ML, CL	A-4,	A-6		' 	1 0	1 180-95	175-90	170-85	165-80	120-40	5-15
1		Channery silt				A-2							120-40	
İ		loam, channery			,		   	,   	   	   				 
j	9-16	Channery silt	CL, CL-ML,	A-4,	A-6,	A-2		0-5	50-90	45-85	35-75	30-70	20-40	5-15
		loam, channery	SC, GC	1										
I		loam, channery	l											
I		clay loam,	l											
I		channery silty												
ļ		clay loam			- 1	- 0					105 75	100 65		
ļ		Channery silty   clay loam,		A-6,	A-4,	A-2		0-5	50-95	45-90	35-75	30-65	20-40	5-15
l ,		clay loam,   channery clay		-			l I	 	 	 	1	1		 
ļ		loam, channery		1			 	l I	 	 	 	1	1	 
 		silt loam,		1			 	 	 	 			1	 
1		channery loam		i			' 	İ	i I	İ	İ	i	i	' 
İ		Channery silty		A-2,	A-4,	A-6		0-10	50 <b>-</b> 95	45-90	35-75	30-65	20-40	5-15
1		clay loam,	SC, GC	1								1		
I		channery loam,												
I		channery clay										1		
		loam, channery		!					!					
	28-33	silt loam	CM MT CC	170 0	70 /	7 (								
!	28-33	·	SM, ML, SC,	A-Z,	A-4,	A-6								
  Wharton	0-1	 	 				 	 	 	 				
į	1-3	Silt loam, loam	CL, ML	A-4,	A-6				95-100	90-100	80-95	70 <b>-</b> 90	20-30	5-15
l l	3-8	Silt loam, loam	CL, ML	A-4	A-6			0	95-100	90-100	80-95	70-90	20-30	5-15
			ML, CL	A-6,	A-7			0	95-100	90-100	180-95	70-90	35-45	10-25
I		loam, silt												
		loam, loam												
			ML, CL	A-6,	A-7			0-10	95-100	90-100	80-95	170-90	35-45	110-25
ļ		loam, silt   loam	 	-			 	 	 			1		
ļ			  ML, CL	A-4,	A-6		 	I 0-10	I I 90 <b>–</b> 1 0 0	ı 185–100	1 165-95	160-80	120-30	ı I 5–15
		silty clay			11 0		! 	1 0 10	1	1	1	1	120 30	1 3 13
		loam		i				i İ	I	İ	İ	i	i	i
ļ	47-53	I												
Blairton														
  Marrowbone			 	 			 	 	 	 				 
   Ravne			 				l I	 	 	 				

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif	ication	Frag	ments		_	ge passi number	_	  Liquid	
and soil name	 	 	Unified	AASHTO	>10  inches	3-10  inches		10	40	200	limit 	ticity  index
	l	l	l	l	_l	l	l	I	.1	l	_l	l
	In 	 	 	 	Pct 	Pct 	 				Pct 	 
Matewan												
32F:	 	 	 	1		 	 				1	 
Gilpin		I	Ī	İ								
	2-3			I _								
	•	•		A-4, A-6		0		1		65-80	20-40	5-15
	İ	Channery silt   loam, channery   loam		A-4, A-6, A-2 	?     	0-5   	50-90   	45-85   	35-75	30-70	20-40	5-15   
	     	Channery silt   loam, channery   loam, channery   clay loam,   channery silty   clay loam	SC, GC   	A-4, A-6, A-2       	2	0-5       	50-90         	45-85       	35-75     	30-70       	20-40	5-15       
	16-22       	Channery silty   clay loam,   channery clay   loam, channery   silt loam,   channery loam	GC, SC     	A-6, A-4, A-2	         	0-5       	  50-95       	45-90       	35-75     	30-65       	20-40	   5-15       
	22-28       	Channery silty	SC, GC, CL-   ML, CL 	A-2, A-4, A-6	       	0-10       	  50-95       	45-90       	35-75     	30-65       	20-40	5-15         
	28-33	İ	ML, CL, SC,	A-2, A-4, A-	5	 !	 !	i	 	i	 	 !
Matewan	 	 										
Muskingum	   	 	 									
Peabody	   	   	   	 		 	 					 
Upshur	 	 	   	 	i				i	i	i	
Other Soils	 	 	 	 		 	 	 	 	 		 

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif 	ication	ĺ	ments		_	e passi umber	-	  Liquid	
and soil name	 	 	   Unified	AASHTO	>10  inches	3-10  inches		10	40	200	limit 	ticity  index
	   In	   	   	   	Pct	Pct	   	.    	.     	   	   Pct	   
33D: Gilpin	   0-2   2-3	 		 			   			   		   
	3-6   6-9	  Silt loam  Channery silt   loam, channery   loam	CL, CL-ML,	A-4, A-6   A-4, A-6, A-2	   			75-90	70-85	65-80	20-40   20-40   1	   5-15   5-15 
	9-16         	Channery silt   loam, channery   loam, channery   clay loam,   channery silty   clay loam	SC, GC   	A-4, A-6, A-2       	         	0-5       	50-90         	45-85         	35-75       	30-70         	20-40	5-15       
	16-22         	Channery silty   clay loam,   channery clay   loam, channery   silt loam,   channery loam	SC, GC   	A-6, A-4, A-2       	         	0-5       	50-95         	45-90       	35-75       	30-65         	20-40	5-15       
	22-28         	Channery silty	SC, GC, CL-   ML, CL 	A-2, A-4, A-6	       	0-10	  50-95       	45-90       	35-75     	30-65	20-40	5-15       
	28-33	İ	SM, ML, CL,  SC	A-2, A-4, A-6			   					   
Wharton	 	   	 				 					   
Muskingum	 	 I	   	 			 	i	i		i	   
Rayne	 		   		i	 	 	i	i	 	i	 
Latham		 	 	 			 					 
Lily		 	 				 					 
Other Soils		 	 	 			 					 

Table H.--Engineering Index Properties--Continued

			Classi	fication		Fragi	ments	Pe		ge passi			
Map symbol and soil name	Depth	USDA texture				   >10	1 2 10	1	sieve r	number		Liquid  limit	
and soll name	!		Unified	AASHTO		inches		4	10	40	200	- '	lindex
	   In	_	I	_		   Pct	   Pct	 	- <sup> </sup>	_	·	   Pct	!
	İ	İ	Ì	İ		İ	İ	İ	İ	İ	İ	İ	İ
33E:													1
Gilpin	,	1											
	2-3		107 07 177										
	•		CL, CL-ML		7 0		0   0-5			170-85		20-40	5-15   5-15
	1 6-9	Channery silt   loam, channery		A-4, A-6,	A-2		0-5	150-90	145-85	35-75	130-70	20-40	1 2-12
	1	loam	I CT-MT	l I		 	l I	1	I	1	1	1	1
	9-16	Channery silt	ISC. CI-MI.	  A-4, A-6,	A-2	 	l 0-5	150-90	145-85	135-75	130-70	120-40	5-15
		loam, channery				I							
	i	loam, channery		i		İ	I	İ	j	j	i	i	İ
		clay loam,						1					1
		channery silty											
		clay loam											
	16-22	Channery silty		A-6, A-4,	A-2		0-5	50-95	45-90	35-75	30-65	20-40	5-15
			SC, GC										
		channery clay											
		loam, channery   silt loam,		1		 		1			1		1
	1	channery loam	1	I I		l I	 	1	1	1	1	1	1
	1 22-28	Channery silty		IA-2. A-4.	A-6	 	I 0-10	150-95	145-90	135-75	130-65	120-40	1 5-15
		clay loam,				i I	0 10		1	1	1	1	0 10
	i	channery loam,		i		İ	İ	i	i	i	i	i	i
		channery clay						1					1
		loam, channery		1									
		silt loam						1					1
	28-33 	1	CL, SC, ML,   SM	A-2, A-4,	A-6	 	 						
Muskingum						 	 						
Matewan						 	 						
M h		1	I	1				1	Į.	1	Į.	1	<u> </u>
Marrowbone													

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	ficati	on		Fragn	ments	l Pe	ercentag	ge passi number		  Liquid	   Plas-
and soil name	l	ODDIT CONCUTO	<u> </u>				'   >10	3-10	' 	DICVC 1	Idilibet		limit	
ana soli name			Unified	İ A	ASHTO		inches		4	10	40	200	- '	index
	   In	.l <u></u> .l	.l	_			l   Pct	   Pct	l 	- I	-   	- I	   Pct	l I
		İ	i	i				I	İ	i	i	i	i	İ
34E:									1	1	1	1		1
Gilpin														
	2-3													
		Silt loam	· ·					0	80-95	75-90	70-85		20-40	5-15
	6-9   	Channery silt   loam, channery   loam		A-4,	A-6,	A-2	   	0-5 	50-90 	45-85 	35-75 	30-70 	20-40	5-15 
	9-16   	Channery silt   loam, channery   loam, channery   clay loam,	SC, GC	A-4,	A-6,	A-2	     	0-5     	  50-90     	45-85     	35-75   	30-70	20-40	   5-15     
	     16-22 	channery silty   clay loam  Channery silty   clay loam,   channery clay	  GC, CL-ML,   CL, SC	  A-6,	A-4,	A-2	   	     0-5 	    50-95 	   45-90 	    35-75 	  30-65 	1 20-40	     5-15 
	     22-28   	channery loam,	  SC, CL-ML,   CL, GC	    A-2,	A-4,	A-6	         	       0-10   	      50-95   	    45-90   	    35-75   	    30-65   	    20-40   	       5-15   
	     28-33 	loam, channery   silt loam   	  SM, CL, SC,   ML	  A-2,	A-4,	A-6	     <b></b> 	       	       	     	   	     	   	       

Table H.--Engineering Index Properties--Continued

Mara armila al	   Damb?	HGD3 +	Classif	ication	Frag	ments			e passi umber			   Dlas
Map symbol and soil name	Deptn 	USDA texture	l		>10	3-10	 	sieve n	umber		Liquid  limit	
ana sorr namo	'   	  -	Unified	AASHTO		inches	4   4	10	1 40	200		index
	In	'	<u> </u>	İ	Pct	Pct	<u> </u>		İ	İ	Pct	
Matewan	   0-1	 	 		 	 	 				 	 
nacewan		Sandy loam,	CL-ML, CL	A-4		0-5	  80-90	175-85	170-80	155-70	10-30	  NP-10
		loam, fine   sandy loam	 	i I	i I		 		i I	i I		 
		Channery sandy   loam, channery		A-1, A-2, A-4		0-10 	50-90 	40-80 	40-75 	20-55 	10-30 	NP-10 
	 	l loam, channery   fine sandy   loam			 	   	   	i 	 		   	 
	 	Channery sandy   loam, channery   fine sandy   loam, channery	ML, SM 	A-1, A-2, A-4   	     	5-15     	50-90     	40-80   	40-75   	20-55   	10-30   	NP-10   
	İ	loam	Ī	İ	i	i	İ	i	i	i	İ	I
	 	Channery sandy   loam, channery   fine sandy   loam, channery	SM, GM	A-1, A-2, A-4	     	15-30     	50-90     	40-80   	40-75     	20-55     	15-30     	NP-10   
	 		ML, GM         	  A-1, A-2, A-4         	             	  30-60           	  50-90           	40-80           	  20-65           	20-55           	  15-30           	  NP-10       
	   31-36		 									
Wharton	 		 		 	 	 				 	 
Marrowbone	 						 					 
Muskingum	 	 	 				 					   
Ramsey	 	 	   		 	 	   					   
Other Soils	 	 	 	i		 	 	 	 	   		 

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragi	ments		rcentag sieve n	-	_	  Liquid	   Plas-
and soil name	l – - I	1	'		>10	3-10	i ·				limit	
and boll name	'   		Unified	AASHTO	inches		4	10	40	200		index
	   In	.	 	_\ 	Pct	Pct				¦	Pct	
34F:	 		 	1	 	 	 	 				
Ravne	0-2	İ	İ	i			i		i	i	i	i
1	2-7	Silt loam, loam	ML, CL	A-4			85-100	80-100	70-85	60-80	20-35	7-15
	7-11 I	Silt loam, loam	ML, CL, GM,   SM	A-4 	 	0 	60-85 	55-80 	50-80 	45-65 	20-35 	7-15 
	11-21     	Channery silt   loam, channery   silty clay   loam, channery   loam	SM	A-4     	       	0     	60-85       	55-80       	50-80       	45-65     	20-35     	7-15       
	21-35     	Channery silty   clay loam,   channery silt   loam, channery	GM 	A-2, A-4, A-6	     	0     	60-95     	55-85       	40-85     	30-60	20-40	7-15     
	35-44       	Very channery   silt loam,   very channery   loam, very   channery silty   clay loam	GM, ML   	A-1, A-2, A-4	         	   0     	40-90         	15-80         	  15-75       	10-60	20-35     	7-15         
	44-48     	Very channery	SM, ML, GM,   GP-GM 	A-4, A-2, A-1	     	     	40-90     	  15-80     	  15-75     	10-60	20-35	7-15     
	48-53		İ	İ								

Table H.--Engineering Index Properties--Continued

   Depth	   USDA texture	Classi	fication	Fragi	ments		_	-		  Liquid	   Plas-
i	İ			>10	3-10	i İ					
į	į	Unified	AASHTO	inches	inches	4	10	40	200	- '	lindex
   In	 		_	   Pct	   Pct	 	-\	\ <u></u>	-\	   Pct	
	1	1	1					1			
1-3		CL-ML, CL   	   A-4 	   	1	  80-90   	75-85 	1	  55-70 	10-30	  NP-10 
	Channery sandy   loam, channery	GM, SM	A-1, A-2, A-4	       	0-10       	50-90       	140-80	40-75     	20-55     	110-30	NP-10       
6-15     	loam, channery   fine sandy   loam, channery	SM, ML	A-1, A-2, A-4	     	5-15       	50-90       	140-80	40-75     	20-55     	10-30	NP-10     
15-23       	Channery sandy   loam, channery   fine sandy	ML, ML 	A-1, A-2, A-4	     	15-30         	50-90       	140-80	40-75     	20-55     	15-30	NP-10     
 	Extremely	SM, ML         	A-1, A-2, A-4	               	30-60               	50-90               	40-80     1 	20-65             	20-55               	15-30               	NP-10               
	In	0-1   1-3   Sandy loam,   10am, fine   sandy loam   10am, channery   10am, channery   10am, channery   10am, channery   10am, channery   10am, channery   10am, channery   10am, channery   10am, channery   10am   15-23   Channery sandy   10am, channery   10a	Depth   USDA texture   Unified   Uni	Unified AASHTO  Unified AASHTO  Unified AASHTO  Unified AASHTO  Unified AASHTO  Unified AASHTO  Unified AASHTO  In Unified AASHTO  In Unified AASHTO  In Unified AASHTO  In Unified AASHTO  In Unified AASHTO  In Unified AASHTO  In In Unified AASHTO  In In In Unified AASHTO  In In In In In In In In In In In In In I	Depth   USDA texture	Depth   USDA texture	Depth   USDA texture	Depth   USDA texture	Depth   USDA texture	Depth   USDA texture	Depth   USDA texture

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif	ication	Fragr	ments		rcentag sieve n	-		  Liquid	   Plas-
and soil name					>10	3-10					llimit	ticity
	 	 	Unified	AASHTO	inches	inches	4	1 10	40	200		index
	'   In	'	'		Pct	Pct		' 		'	Pct	' 
Gilpin	I I 0-2	 	 	 	 							
-	2-3	ĺ	İ									
	3-6	Silt loam, loam	CL, CL-ML, ML	A-4, A-6			80-95	75-90	70-85	65-80	20-40	4-15
	 	Channery silt   loam, channery   loam, silty   clay loam		A-4, A-6   	     	     	50-95     	45-90   	35-85     	30-80   	20-40   	4-15     
	   	Channery silt   loam, channery   loam, very   shaly silty	CL, CL-ML, GC     	A-4, A-6   	     	     	50-95     	45-90   	35-85     	30-80	20-40	4-15   
	16-22       	clay loam  Channery silty   clay loam,   channery silt   loam, very   channery silty		  A-6, A-7-6     	       	       	  50-95       	  45-90     	  35-85       	30-80     	20-40     	   4-15     
	22-28       	clay loam  Channery silty   clay loam,   very channery   silty clay   loam, channery   silt loam	 	  A-6, A-7-6     	         	         	  50-80     	  30-60       	  30-80     	  25-65       	  20-40     	   4-15       
	28-33		 	 				i				
Hazleton		  Channery sandy   loam	  GM, ML, SM	  A-2, A-4		0-15	  60-85	  60-80	  60-75	35-55		
	7-36	Channery sandy	GM	A-1, A-2, A-4	     	0-50	60-95   	45-90 	35-70	20-55	15-30	NP-8   
	   	Channery loam,   very channery   sandy loam,   very channery	SM	  A-1, A-2, A-4   	     	0-60     	55-80     	35-75   	25-65   	15-50   	15-30	NP-8     
		loamy sand  Unweathered   bedrock 	 	 	     	     	     	   	     	   	   	     

Table H.--Engineering Index Properties--Continued

and soil name     		USDA texture   							1	sieve n	umber		חוות ווו	Plas-
İ		i	Unif	i od		SHTO	   >10  inches			1 10	1 40		limit	
İ		 	UNII.	Lea	AA;	SHTO	Inches	Inches	4 	1 10	1 40	1 200	1	Index
25.0	In	' '			<u>'</u>		Pct	Pct	 	<u>'</u>	'	`	Pct	
0 E m -					1			l	l	1	1		1	
- 2	0-1													
-		Channery loam,     channery sandy    loam, channery    silt loam		ML	A-2, 1	A-4		0-15   	60-80   	50-70   	45-65   	30-60   	10-30   	NP-10   
		Channery loam,   channery sandy    loam, channery    silt loam,   channery sandy    clay loam,   channery clay     loam		SM	A-2, i	A – 4	       	0-15           	60-80             	50-70             	45-65           	30-60             	10-30           	NP-10           
1:	3-21	Channery clay     loam, channery    loam, channery    sandy clay     loam, channery    sandy loam,     channery silt	SM	GM,	A-2, 1	A – 4		0-20           	  60-95       	50-95           	45-85         	30-60           	15-30         	NP-10           
2:	21-38	Channery clay loam, channery sandy clay loam, channery silt loam, channery loam, channery sandy	GM	SM,	  A-4, 2         	A-2	         	   0-20         	  60-95         	  50-95         	  45-85         	  30-60           	  15-30         	  NP-10           
	8-53	channery loam,   extremely   channery sandy   loam,   extremely   channery silt   loam,   extremely   channery sandy   channery sandy   clay loam,   extremely   channery clay   channery clay   loam		GP,		A-2, A-4		  10-30                         	  30-75                   	  25-70                         	20-60 	5-40   1   1   1   1   1   1   1   1   1	  15-30                       	NP-10
53	3-58				1									

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragi	ments		rcentag sieve n			  Liquid	   Plas-
and soil name			'		>10	3-10	İ				llimit	
	i İ	İ	Unified	AASHTO	inches	inches	4	10	40	200	. '	lindex
	   In		' 	<u> </u>	Pct	Pct	! !	! !	! !	! !	Pct	! !
Matewan	   0-1		 			 	 					 
	1-3   	Sandy loam,   loam, fine   sandy loam	CL, CL-ML   	A-4   	   	0-5   	80-90   	75-85   	70-80   	55-70   	10-30   	NP-10   
	3-6     	Channery sandy   loam, channery   loam, channery   fine sandy   loam	ML, ML	A-1, A-2, A-4	       	0-10       	50-90       	40-80     	40-75     	20-55     	10-30     	NP-10       
	   	Channery sandy   loam, channery   fine sandy   loam, channery	GM, SM 	A-1, A-2, A-4   	       	5-15       	50-90       	140-80	40-75     	20-55     	10-30	NP-10     
	ĺ	Channery sandy   loam, channery   fine sandy   loam, channery   loam	GM, ML	A-1, A-2, A-4	       	15-30         	50-90         	140-80	40-75     	20-55     	15-30     	NP-10       
	23-31	Extremely   channery sandy   loam,   extremely   channery loamy   sand,   extremely   channery loam	GC-GM   	A-1, A-2, A-4             	                   	30-60	50-90               	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20-65 	20-55               	15-30                 	NP-10
Other Soils	   	   	   		   	   	   					   

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif 	ication	i	ments			e passi: umber	-	  Liquid	
and soil name	 	 	   Unified	AASHTO		3-10  inches	4	10	40	200	limit 	ticity  index
	   In	 	! 	'	   Pct	Pct	¦	'	'	 	   Pct	
37E:							1	1				1
Matewan	I I 0-1	 	 	1				 	 	 		
Hacewan	1-3	loam, fine	CL, CL-ML 	A-4 		0-5	80-90 	75-85 	70-80 	  55-70 	10-30	NP-10
	3-6	sandy loam  Channery sandy   loam, channery   loam, channery   fine sandy	GM, SM	  A-1, A-2, A-4   		   0-10   	  50-90     	  40-80   	  40-75     	  20-55     	  10-30   	  NP-10     
	6-15   	loam  Channery sandy   loam, channery   fine sandy   loam, channery   loam	GM, SM	  A-1, A-2, A-4   	     	   5-15     	  50-90     	  40-80     	  40-75     	  20-55     	  10-30     	  NP-10     
	15-23     	Toam  Channery sandy   loam, channery   fine sandy   loam, channery   loam	ML, GM	A-1, A-2, A-4		  15-30     	  50-90     	40-80       	  40-75     	  20-55     	  15-30   	NP-10     
	23-31           		GC-GM         	A-1, A-2, A-4   I   I   I   I	           	30-60   	  50-90           	40-80             	  20-65           	  20-55           	15-30           	NP-10           
	31-36		İ	i	i	i	i	i			i	i
Latham	İ	silty clay	  CL-ML, ML, CL 	  A-4, A-6		   0-2 	  85-100 	  75-100 	  70-100 	  65-90 	20-35	5-12
	4-8	silty clay	  CL-ML, ML, CL 	  A-4, A-6 		   0-2 	  85-100 	  75-100 	  70-100 	  65-90 	20-35	5-12
	8-28 	loam, silty	  CH, ML, CL 	  A-6, A-7 		   0-2 	  85-100 	  75-100 	  70-100 	  65-90 	30-65	110-40
	28-33 I	clay  Silty clay,   silty clay   loam	  CL, CH 	  A-7 		0-4	  85-100 	  70-95 	  65-95 	  60-90 	30-65	25-40
	33-36 I		  CH, CL 	  A-7 		   0-5 	  85-100 	70-95 	  65-95 	  60-90 	30-65	25-40
	1 1 36-44	•	1 1	1	1	' 	· 	1	1		1	

Table H.--Engineering Index Properties--Continued

		T	Classif	ication	Fra	gments		rcentag				1
Map symbol	Depth	USDA texture	ļ					sieve n	umber		Liquid	
and soil name	 		   Unified	   AASHTO		3-10 s inches		I 10	1 40	1 200	_ limit	ticity  index
	 		l onlined	AASHIO	Inche	I	4	1 10	1 40	1 200		I
	In	į	İ	İ	Pct	Pct	<u> </u>	i	<u> </u>	<u> </u>	Pct	i
Gilpin	 											
Upshur	 			 								
Wharton	 											
Rayne	 											
Other Soils	 						 					
38F:	! 			1	i		' 	i	İ	i	i	İ
Highsplint	0-2		İ	ĺ								
	2-5	Loam, silt loam	CL-ML, CL	A-4, A-6		5-15	45-80	40-70	40-70	35-65	15-35	5-15
	5-11   	Channery loam,   channery silt   loam		A-4, A-6, A 	-2	5-25 	45-80 	40-70 	40-70 	35-65 	15-35 	5-15 
	11-33   	Very channery	CL-ML, SC	A-4, A-6, A   	-2     	5-25   	45-75     	40-70	35-65	30-60	15-35	5-15   
	33-50   	Very channery	SC, CL-ML	A-2, A-4, A   	-6    	5-35   	45-75   	40-70	35-65	30-60	15-35	NP-12   
	50-65         			A-2, A-4, A       	-6        	5-35       	45-75         	40-70       	35-55       	30-55	15-30	NP-10         

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragi	ments		rcentag sieve n	-		  Liquid	   Plas-
and soil name	i	İ		1	>10	3-10	i				limit	
		į	Unified	AASHTO	inches	inches	4	10	40	200	- 1	lindex
	   In	 	 	_	   Pct	   Pct	 	-\	\ <u></u>	-	   Pct	
	1		I	1			I				1	
Matewan	0-1											
		loam, fine	CL-ML, CL 	A-4 		0-5 	80-90 	75-85 	70-80 	55-70 	10-30 	NP-10 
		sandy loam										
		Channery sandy   loam, channery   loam, channery	CL-ML	A-1, A-2, A-4 		0-10   	50-90   	40-80   	40-75   	20-55   	10-30   	NP-10   
		fine sandy										
		loam										
	6-15 	Channery sandy		A-1, A-2, A-4		5-15 	50-90 	40-80 	40-75 	20-55 	10-30 	NP-10
		fine sandy   loam, channery   loam	 		 	 	 	 		 	 	
	l 15-23	Channery sandy	ICTMT., MT.,	  A-1. A-2. A-4		1 115-30	150-90	140-80	140-75	120-55	115-30	INP-10
	10 20	loam, channery			i					1		
		fine sandy										!
		loam, channery   loam			1	1	1	1		1		
	ı ı 23–31	Extremely	IGC-GM. GM.	   A = 1		1 130-60	1 150-90	140-80	120-65	120-55	115-30	INP-10
	23 31	channery sandy			i	1	30 30	1	120 00	120 00	1 2 30	
		loam,	i ,	İ	i	i	i	i	İ	i	i	i
		extremely	İ		İ	İ	İ	İ	j	İ	j	İ
		channery loamy										
		sand,										
		extremely										
		channery loam					1				1	
	31-36											

Table H.--Engineering Index Properties--Continued

Map symbol	   Denth	USDA texture	Classif	ication		Fragi	ments			e passi umber		  Liquid	   Plac=
and soil name	l pebru	ODDA CEACUIE	! 		'	>10	3-10	 	STEVE II	uniber		limit	
		İ	Unified	AASHTO	į		inches	4	10	40	200	- 1	index
	In		   	! !		Pct	Pct	 		¦		Pct	
Cloverlick	   0-2	 	 	 			 	 					
	9-13	Loam, silt loam  Channery loam,   channery silt   loam	CL-ML, SC,									20-35  20-40 	
	13-29 	Very channery	SC-SM, CL-ML,   ML, SM 	A-4, A-6   			  15-35   	50-80   	40-75   	35-70	35-70   	20-35	5-15     
	29-45 	Very channery   loam, very   channery silt   loam	ML, SC-SM	A-2, A-4, A   	4-6      		30-50   	50-80   	40-75   	35-70	35-70   	20-35	5-15   
	45-50 		GC-GM, SC-SM,  GM, SM	A-2, A-4, A   	A-6      		  30-50   	  50-80   	40-75   	35-70   	30-70     	15-35   	5-15     
	50-65 		SC-SM, GC-GM,	A-6, A-4, A       	A-2         		30-60       	40-80     	40-80     	30-70     	30-60	15-30       	4-10     
Shelocta			 				 	 					
Fedscreek			 										
Gilpin			 	 				 					
Other Soils	   	   	   	   			   	   					

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Frag	ments		rcentag sieve n			  Liquid	   Plas-
and soil name	 		   Unified	   AASHTO	>10  inches	3-10  inches	l	10	40	200	limit	ticity  index
	   In	 	.  	_	   Pct	   Pct	 				Pct	 
39F:	 					 	 					 
Berks												
	1-3	Very channery		A-1, A-2, A-4		15-30	140-80	35-70	130-60	125-45	25-35	5-10
	   	loam, very   channery silt   loam	SM 		 		 		 			 
	ı I 3-7	Very channery	IGM. SC. SM.	   A = 1		1 0-30	140-80	135-70	1 130-60	125-45	125-35	   5-10
	, <i>3</i> ,	• •	GC		İ	1	1	1	1	1	123 33	1 3 10
	' 	channery silt		i	i	i	İ	i	i	i	i	i I
		loam	i	i	į	į	İ	i	i	i	İ	I
	7-17	Extremely	SC, GC, GM,	A-1, A-2, A-4		0-30	40-80	35-70	25-60	120-45	25-35	5-10
		channery silt	SM									
		loam,	1									
		extremely	[				[	1		1		
		channery silty	7					1				
	 	clay loam,   extremely					1	1	1	1		
	 	channery loam	I I	l I	1	1	 	1	1	1		 
	I I 17-24	Extremely		IA-1. A-2. A-4	i	1 0-30	140-80	135-70	125-60	120-45	125-35	   5-10
	1, 21	channery silt			İ	1	1	1	123 00	1	123 33	1 3 10
	' 	loam,	i	i	i	i	İ	i	i	i	i	I
		extremely	i	i	į	į	İ	i	i	i	İ	I
		channery silty	<i>,</i>									
		clay loam,	1				1					
		extremely										
		channery loam	1									
	24-29	1	1									
	l		1							1	1	

Table H.--Engineering Index Properties--Continued

Map symbol	   Donth	   USDA texture	Classi	fication	Frag	ments		rcentag sieve n			  Liquid	   Dlag
and soil name	l pebru	1 OSDA CEXCUIE	I	1	l	I 3-10	 	sieve n	uniber		limit	
and Soll name		İ	Unified	AASHTO		inches	4	10	40	200		index
	In		 	_	_   Pct	Pct	 	, I 		 	Pct	
					1			1				
Shelocta		  Very stony loam	  GM, ML, SM,   CL-ML	   A-4				75-95				  NP-10
	   	Silty clay	CL, GC, SC,   CL-ML	A-4, A-6		0-10	55-95       	50-95   	45-95   	40-90	25-40	4-15
	11-24   	Silty clay	SC, GC, CL-   ML, CL 	A-4, A-6		0-10	  55-95     	50-95     	45-95     	140-90	25-40	4-15     
	24-39	Silty clay	SC, GC, CL-   ML, CL 	A-6, A-4		0-10	55-95       	50-95     	45-95   	40-90	25-40	4-15     
	Ì	Silty clay	SC, CL	A-4, A-6		0-10	  55-95     	  50-95     	45-95     	40-90     	25-40	4-15     
	   	Silty clay	SC, GC, CL-   ML, CL 	A-4, A-6		0-10	55-95         	50-95     	45-95     	40-90	25-40     	4-15       
Highsplint												
Cloverlick												
Matewan												

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragr	ments		rcentage sieve n			  Liquid	   Plas-
and soil name			İ	T	>10	3-10	İ				limit	
	 	1	Unified	AASHTO	linches	inches	4	1 10	40	200		index
	   In	!		- <u> </u>	Pct	Pct	' !	' !	' <del></del>	' !	Pct	! <del></del>
Other Soils	l l 0-7	  Silt loam, loam	  CL-ML, ML	  A-4	0-2	   0-5	  80-95	  75-95	  60-95	  55-90	  15-35	  NP-10
			CL, CL-ML,   GC, SC	A-4, A-6	0-5   	0-10 	55-95   	50-95   	45-95   	40-90 	25-40 	4-15 
	20-35	Silty clay	SC, CL-ML,	A-6, A-4	0-5	0-10	  55-95 	  50-95 	45-95 	40-90	25-40	4-15
	35-45   	Channery silty   clay loam,   channery silt   loam, channery	CL-ML	A-6, A-4	0-5	0-10   	40-85     	35-70     	  25-70   	20-65   	120-40	4-18     
	45-65   	loam  Channery silt   loam, channery   silty clay   loam, very   channery loam		A-4, A-6, A-   1-b, A-2	0-10	   0-15     	  40-85     	  35-70       	  25-70       	  20-65     	  20-40     	   3-20     
40D:	 	1	[ ]			 	 	 				 
Dormont	7-11		ML, CL  CL, ML 	A-4, A-6  A-4, A-6			75-100  75-100 				20-40  20-40 	5-15   5-15 
	11-23	•	ML, CL, SC	A-4, A-6		0-20 	75-100 	70-95 	  60-95 	45-85	25-40	5-15 
	23-30   	Channery silty   clay loam,   channery silt	I	A-4, A-6		0-20   	  75-100   	70-95   	60-95   	45-85   	25-40   	   5-15   
	30-40	Channery silty   clay loam,   channery silt   loam	I	A-6, A-4		0-20   	75-100     	70-95     	  60-95     	45-85   	25-40	   5-15     
	     	Very channery	GC         	A-4, A-6, A-7	;             	0-30           	65-100             	60-95             	55-95           	40-85           	25-50             	10-25             
	54-59 	] 	 			 	 	 	 	 		 

Table H.--Engineering Index Properties--Continued

Map symbol	Denth	   USDA texture	[ [	С	lassif	icati	on		Fragr	nents			e passinumber	ng	  Liquid	   Plas-
and soil name	200011		ˈ						>10	3-10	i .	01010 11	u 0 1		limit	
		į		Unif	ied	A	ASHTO		inches		4	10	40	200		lindex
	In	l	 						Pct	   Pct	 	 		 	Pct	! 
  Latham  		silty clay	  CL- 	ML,	ML, CL	  A-4, 	A-6			   0-2 	  85-100 	  75-100 	  70-100 	  65-90 	  20-35 	   5-12 
	4-8	silty clay	  CL, 	ML,	CL-ML	  A-4,	A-6			   0-2 	  85-100 	  75-100 	  70-100 	  65-90 	20-35	5-12
	8-28	loam, silty	  CH, 	ML,	CL	  A-6,	A-7			0-2	  85-100 	  75-100 	  70-100 	  65-90 	30-65	10-40
	28-33	clay  Silty clay,   silty clay   loam	  CL, 	СН		A-7				0-4	  85-100 	  70-95 	  65-95 	  60-90 	30-65	  25-40 
	33-36		  CL, 	СН		A-7				0-5	  85-100 	  70-95 	  65-95 	  60-90 	30-65	  25-40 
	36-44															
Other Soils		 	 		-									 		
40E:		 	 							 	 	 	 	 		 
Dormont    	7-11	Silt loam,   silty clay	ML,  ML, 			A-4,  A-4,							65-95  65-95 		20-40  20-40 	5-15   5-15 
	11-23	loam  Silty clay   loam, silt   loam	  SC, 	CL,	ML	  A-4,	A-6			   0-20 	  75-100 	  70-95 	  60-95 	  45-85 	125-40	   5-15 
	23-30	Toam  Channery silty   clay loam,   channery silt   loam	  CL,   	ML,	SC	A-4, 	A-6			0-20	  75-100   	  70-95   	  60-95   	  45-85   	25-40	   5-15   
	30-40	Channery silty   clay loam,   channery silt		CL,	ML	A-6,	A-4			0-20	  75-100   	  70-95   	  60-95   	  45-85   	25-40	5-15   
	40-54	loam  Very channery   silty clay   loam, very   channery silt   loam, very   channery silty   clay, very   channery clay	ML       		SC,	A-4,           	A-6,	A-7		0-30	  65-100           	  60-95             	  55-95             	  40-85           	  25-50             	  10-25             
İ	54-59	1	 			 				 						

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	   USDA texture	C1	assif	icatio	on	 	i	nents		rcentage sieve n	-	-	  Liquid	
and soil name     		 	   Unifi 	ed	   A <i>I</i> 	ASHTO		>10    inches  		   4 	10 	40 	200 	limit   	ticity  index 
	In						i	Pct	Pct				į	Pct	į
Latham  		  Silt loam,   silty clay   loam	  ML, CL, 	CL-ML	  A-4, 	A-6			0-2	  85-100 	  75-100 	  70-100 	  65-90 	  20-35 	   5-12 
ļ	4-8	•	  CL, CL-M 	L, ML	A-4,	A-6			0-2	  85-100 	  75 <b>-</b> 100 	70-100	  65-90 	20-35	5-12
	8-28	Silty clay   loam, silty	CH, ML,	CL	  A-6, 	A-7		 	0-2	  85-100 	  75-100 	  70-100 	  65-90 	30-65 	10-40
	28-33	silty clay	  CH, CL 		  A-7 				0-4	  85-100 	  70-95 	  65-95 	  60-90 	30-65 	  25-40 
	33-36	silty clay	  CL, CH 		  A-7 				   0 <b>-</b> 5	  85-100 	  70-95 	  65-95 	  60-90 	  30-65 	  25-40 
	36-44	loam 	    -		 								 		
Other Soils		   	   		   				              br>  	   	   	   			
Beech	7-10 10-22 22-36 36-45	Loam, silt loam   Channery loam,   channery silt   loam   Channery clay   loam   Channery clay   loam   Channery clay   loam   loam   Channery clay   loam   Very channery   loam, very   channery clay   loam	CL-ML, M    SC, ML,    ML, SC,    ML, SC,	CL	A-4,	A-6, A-6,	A-2	 	5-15	75-100   	    70-95      70-95	65-95       60-95     60-95 	50-90   	  20-35  20-35      20-35      25-40        20-35	   5-10     5-15 
	45-52	Toam  Very channery   loam, very   channery clay   loam	  CL, ML,   	SC	  A-2,   	A-4,	A-6		  15-45   	  65-100   	  60-95   	  55-95   	  40-85   	  20-35   	4-12   
	52-65	•	  CL, ML,           	sc	A-2,             	A-4,	A-6		20-60	  65-100           	  60-95           	  55-95           	40-85             	20-35             	4-12             

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif	ication	Fragi	ments		rcentag sieve n	-	_	  Liquid	   Plas-
and soil name	I -	I			>10	3-10	1				limit	Iticity
	i I		Unified	AASHTO	linches	inches	4	10	40	200		lindex
	   In 	.    	   	   	-'   Pct 	   Pct 	'   	·\   	-	·\   	Pct	   
Shelocta	   0-1	i I	i I	 	i 	 	 	i i	i i	i i	i 	
	1-7	Loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	10-20	80-95	60-90	55-85	45-80	20-35	4-10
	7-10   	Channery loam,   channery clay   loam, very	GC, GM, ML	A-4, A-6   	0   	20-30   	55-95   	50-85   	35-80   	30-65   	20-30	4-10   
	   10-22   	channery loam  Channery loam,   very channery   silt loam,   channery clay	CL, ML, CL-   ML, GC, GM	  A-4, A-6   	0	  20-40   	  55-95     	  50-85   	30-75   	  25-65   	120-30	4-10
	   22-36 	loam  Channery clay   loam, channery		  A-6, A-7-6 	   0 	  20-40 	  55-95   	  50-85 	  30-75 	  25-65 	30-40	7-20 
	36-45 	Very channery   loam, channery		A-4, A-6	,   0 	40-60 	40-85 	50-85 	30-75	25-65	20-30	4-10
	45-52	Very channery   loam, channery		A-4, A-6	0	45-65 	40-85 	35-85	30-75	25-65	20-30	4-10
	52-65	Very channery   loam, channery		A-4, A-6	0	50-80	40-85 	35-80	30-75	25-65	20-30	4-10
	ļ	loam		1			1	1	1	1	1	1
	l	I		I	1	I	1	I	I	I	1	

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	   USDA texture	Classif	icatio	on	Fragi	ments		_	e passi umber	_	    Liquid	     Plas-
and soil name			Unified	   AA	ASHTO	>10  inches		   4	10	40		limit	
	In	 	' 			Pct	Pct	 				Pct	 
Vandalia	0-1							 					
vanuarra	1-7 7-10	Loam, silt loam  Channery loam,   channery clay   loam, very	CL, CL-ML,	A-4,  A-4,						55-85  35-80 		20-35  20-30 	•
	10-22	channery loam  Channery loam,   very channery   silt loam,   channery clay	CL, ML, CL-   ML, GC, GM 	  A-4,   	A-6	   0   	  20-40   	  55-95   	  50-85   	  30-75     	  25-65     	  20-30   	   4-10   
	22-36	loam  Channery clay   loam, channery   loam		  A-6, 	A-7-6	   0 	  20-40 	  55-95 	  50-85 	30-75 	  25-65 	30-40 	   7-20 
	36-45	Yery channery   loam, channery   loam		A-4, 	A-6	   0 	40-60 	  40-85 	50-85 	30-75	25-65 	20-30	4-10 
	45-52	Very channery   loam, channery   loam		A-4,	A-6	0	45-65 	40-85 	35-85 	30-75	25-65 	20-30 	4-10
	52-65	Very channery   loam, channery   loam		A-4,	A-6	0	50-80   	40-85   	35-80   	30-75	25-65	20-30	4-10 
Other Soils	0-1	 	 	 			 	 					 
	7-10	Loam, silt loam  Channery loam,   channery clay   loam, very	CL, CL-ML,   GC, GM, ML 									20-35  20-30 	
	10-22	channery loam  Channery loam,   very channery   silt loam,   channery clay	CL, ML, CL-   ML, GC, GM 	  A-4,     	A-6	   0     	  20-40     	  55-95     	  50-85     	  30-75     	  25-65     	  20-30     	   4-10   
		Channery clay   loam, channery   loam		A-6,	A-7-6	0	20-40	  55 <b>-</b> 95 	50-85	30-75	25-65	30-40	7-20
	36-45	loam  Very channery   loam, channery   loam		A-4,	A-6	0	40-60	40-85 	50-85	30-75	25-65	20-30	4-10
		loam  Very channery   loam, channery   loam		  A-4, 	A-6	0   	45-65   	40-85   	35-85	30-75	25-65	20-30 	4-10
		Yery channery   loam, channery   loam		A-4, 	A-6	0	50-80   	  40-85   	35-80 	30-75 	25-65   	20-30   	4-10 

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif:	ication	Frag	ments			e passi: umber		    Liquid	     Plas=
and soil name	Dopon		'	 [	>10	3-10		01010 11	u 0 1		limit	
		[ 	Unified	AASHTO	linches	linches	4	10	40	200	 	index
	In		'   		Pct	Pct	'   	'   	' 	'	Pct	'   
42E:	 		'   		   		   	   	   	 		   
Beech	0-1	i	1					' 				
	1-7	Loam, silt loam	CL-ML, ML, CL	A-4, A-6		0-15	75-100	70-100	165-95	150-90	120-35	5-10
	7-10	Channery loam,		'	 	5-15 		•				
	10-22	loam  Channery loam,   channery clay   loam	  SC, ML, CL   	  A-4, A-6, A-2   	     	  10-25   	  75-100   	  70-95   	  60-95   	  45-85   	  20-35   	   5-10   
	İ	Channery clay   loam, channery   loam		A-6, A-4, A-2 	   	10-25 	75-100   	70-95   	60-95   	45-85   	25-40 	5 <b>-</b> 15   
	Í I	Very channery   loam, very   channery clay   loam	ML, CL, SC   	A-6, A-4, A-2 	     	10-35   	75-100	70-95   	60-95     	45-85   	20-35   	4-12   
	45-52 	Very channery   loam, very   channery clay	SC, ML, CL   	A-2, A-4, A-6 	   	15-45   	65-100   	  60-95   	55-95   	40-85   	20-35   	4-12 
	52-65         		İ	A-2, A-4, A-6	           	20-60             	  65-100           	  60-95           	  55-95           	40-85             	20-35             	4-12           
Shelocta			 	 	 		 	 	 			 
Vandalia			 	 								
Other Soils	   		   	   	   		   	   	   			   

Table H.--Engineering Index Properties--Continued

36			Classif	ication	Fragi	ments			e passi			
Map symbol and soil name	Depth	USDA texture	 		-    >10	J 3-10	:	sieve n	umber		Liquid  limit	
and soll name			   Unified	AASHTO	1	inches	4	10	1 40	200		index
	   Tn		 	[	   Pct.	   Pct.	ļ	l	ļ	[	   Pct	
				i			İ	İ	İ	İ		İ
43E:												
Pineville												
	1-3   	Channery loam,   channery fine   sandy loam,   channery silt	ML, CL-ML	A-2, A-4		0   	85-100   	80-100   	65-100   	55-95   	15-35   	NP-10   
	1	loam	 	I I	1	1	 	l I	 	 	1	1
		Channery loam,   channery sandy   loam, channery	SM, ML	A-2, A-4	   	0   	  80-100   	  75-100   	  65-95   	  55-95   	15-35	NP-10 
		clay loam  Channery loam,   channery clay	SC-SM, SC	  A-4, A-6, A-3	   	   0 	  75-100 	  70-100 	  65-95 	  55-95 	  15-35 	  NP-10 
	 	loam, channery   sandy clay   loam, channery   sandy loam	 	 	     	     	     	     	     	     	     	     
	   	channery clay   loam, channery   loam, channery	CL-ML, CL   	A-4, A-6, A-1	2         	0       	70-100       	70-100       	65-95       	55-95       	15-35       	NP-10       
	37-48	sandy loam  Channery sandy		  A-2, A-4, A-	 5	0	  65-100	  55-100	  35-95	  20-75	15-35	  NP-15
		clay loam,   channery clay   loam, channery   loam, channery   sandy loam		 		     	       	       	       	       		     
	48-65         	Channery sandy   clay loam,   channery clay   loam, channery   loam, channery   sandy loam	GM, GC-GM,   SC, CL-ML 	A-2, A-4, A-	5	0   0   1   1   1   1   1   1   1   1	65-100         	  55-100         	35-95         	20-75           	15-35         	NP-15         
Cloverlick			 				 	 				
Highsplint			 					 				
Beech			 					 				
Other Soils								 				

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragi	ments		rcentag sieve n			  Liquid	   Plas-
and soil name	, - <u>1</u> -	İ	' 	1	:   >10	I 3-10	i				limit	
	 		Unified	AASHTO	linches	linches	4	10	40	200		index
	   In		' 	_	Pct	Pct		·¦	'	·¦	Pct	
4.40				Ţ								
44C: Shelocta	I I 0-0							1		1		
Snerocta		Very stony loam		A-4		3-15	80-95	75-95	160-95	55-90	15-35	NP-10
		'	CL-ML		ļ.							
	4-11		GC, SC, CL-	A-4, A-6		0-10	55-95	150-95	45-95	140-90	25-40	4-15
		loam, silt   loam, channery	ML, CL		ļ							
	 	silty clay	 			 	1	1	1	1	1	1
	l İ	loam	 	l I		 	1	1	1	1		1
	I 11-24		SC, GC, CL-	  A-4. A-6	i	0-10	155-95	150-95	145-95	140-90	125-40	1 4-15
	, 		ML, CL		i				1	1		
		loam, channery	•	i	i	İ	i İ	i	i	i	i	i
		silty clay	İ	İ	İ	j	İ	İ	İ	İ	İ	İ
		loam		1	1							
	24-39		SC, GC, CL-	A-6, A-4		0-10	55-95	50-95	45-95	40-90	25-40	4-15
			ML, CL		I							
		loam, channery			I							
		silty clay	!		!			!	!	!	!	
	20 55	loam	1 0 00		!			150.05	145.05		105 40	4 1 5
	39-55		CL, SC, GC,   CL-ML	A-4, A-6		1 0-10	55-95	50-95	45-95	140-90	25-40	4-15
	 	loam, silt   loam, channery				 	1	1	1	1	1	1
	 	silty clay	l I	I	i I	 	1	1	1	1	1	1
	! 	loam	! 	1	i	l I	İ	i	İ	i	i	İ
	55-65		CL-ML, GC,	A-4, A-6	i	0-10	155-95	150-95	145-95	140-90	125-40	1 4-15
			CL, SC		i							
		loam, channery	İ	i	i	į	į	i	i	i	i	į
		silty clay			I					1		
		loam	l	1	1							
					1							

Table H.--Engineering Index Properties--Continued

Map symbol	   Donth	   USDA texture	Classif	ication	Fragi	ments		rcentag sieve n			  Liquid	   Dlag-
and soil name	ı 1 pebru	USDA CEXCUIE	 	 I	>10	I 3-10	 	steve II	ulimer		limit	
and Soll name			Unified	AASHTO		inches	4	10	40	200	- '	index
	l I Tn	 	l	 	   Pct		 	l	<u> </u>	<u> </u>	   Pct	
			i	! 	1	1	' 	i I	i	i	1	i
Beech	0-1	i	i		i	i				i	i	i
	1-7	Loam, silt loam	CL, CL-ML, ML	A-4, A-6		0-15	75-100	70 <b>-</b> 100	65-95	50 <b>-</b> 90	20-35	5-10
	7-10	Channery loam,	CL-ML, ML, CL	A-4, A-6		5-15	75-100	70-100	65-95	50-90	20-35	5-10
		channery silt	I									
		loam	I									
	10-22	Channery loam,		A-4, A-6, A-2		10-25	75-100	70-95	60-95	45-85	20-35	5-10
		channery clay	1									
		loam	I									
	22-36	Channery clay		A-6, A-4, A-2		10-25	75-100	70-95	60-95	45-85	25-40	5-15
		loam, channery	1									
		loam	1			1		l	1		1	1
	•	Very channery	ML, CL, SC	A-6, A-4, A-2		10-35	75-100	70-95	60-95	45-85	20-35	4-12
		loam, very	!				ļ	ļ				
		channery clay										
	1 45 50	loam  Very channery	LOT MT CC	 		115 15	   CE 100	1 ( 0 0 0 0	1 = = 0 =	140 05	100 25	1 1 10
	1 45-52		ICL, ML, SC	A-Z, A-4, A-6		115-45	102-100	100-95	122-92	140-85	120-33	4-12
	 	loam, very   channery clay	 	l I	 	 	 	 	 	1		1
	 	loam	I I	l İ	l I	 	 	l I	1	1	1	1
	ı I 52–65	Extremely	IMI. SC. CI.	I IA-2. A-4. A-6		120-60	I 65-100	1 160-95	ı 155–95	140-85	120-35	1 4-12
	1 32 33	channery loam,			! 	1	1	1	1	1	1	1 12
	' 	extremely	i	! 	' 	<u>'</u>	' 	i I	i	i	i	i
	İ	channerv clav	i		i	i	i I	i I	i	i	i	i
	I	loam,	i I		i i	i I	I		İ	i	i	i
	İ	extremely	İ						i	i		
		channery silt	İ		İ	İ			İ	İ	İ	İ
		loam	I	l						1		
			I									

Table H.--Engineering Index Properties--Continued

26		HGD2	Classi	fication	Fragi	ments		rcentag				
Map symbol and soil name	Depth	USDA texture	<u> </u>	1		I 3-10		sieve n	umber	•	Liquid  limit	
and soll name	 		   Unified	AASHTO	/IU  inches		4	10	40	200	 - +++	index
	l	l	l	_		l	l	1	l	l	1	l
	In		1	T	Pct	Pct					Pct	
					!			!		!		
44D:	I I 0-0				ļ			1		1	1	
Shelocta		  Very stony loam	IMT CM CT	   A-4		1 2 15	  80-95	175-95	160-95		115-35	
	U-4 		ML, SM	A-4		1 2-12	100-93	173-93	100-93	122-90	112-22	NP-10
	4-11		SC, GC, CL-	A-4, A-6	i	0-10	55 <b>-</b> 95	50 <b>-</b> 95	45 <b>-</b> 95	140-90	25-40	4-15
			ML, CL	i	i	İ	İ	j	j	j	i	į
		loam, channery			1						1	
		silty clay			1							
		loam			I							
	11-24			A-4, A-6		0-10	55-95	50-95	45-95	40-90	25-40	4-15
			GC, SC					1		1		
		loam, channery			ļ			!		!	!	
		silty clay   loam						1		1	1	
	1 24 20		CL, CL-ML,	  A-6, A-4		1 0 10	1 5 5 0 5	150 05	145 05	140 00	125-40	1 1 1 5
	24-39 		GC, SC	A-0, A-4		1 0-10	122-32	120-32	143-93	140-90	123-40	1 4-13
	l I	loam, channery		I I	l I	 	 	1	1	1	1	1
	 	silty clay			i	! 	 	i	1	i	i	
	' 	loam			i	İ	' 	i	i	i	i	i
	39 <b>-</b> 55	Silty clay	GC, SC, CL,	A-4, A-6	i	0-10	55-95	50 <b>-</b> 95	45-95	140-90	25-40	4-15
		loam, silt	CL-ML		1							
		loam, channery			1						1	
		silty clay			1						1	
		loam			I							
	55-65		CL, CL-ML,	A-4, A-6		0-10	55-95	50-95	45-95	40-90	25-40	4-15
			GC, SC									
		loam, channery			!			!		!		
		silty clay		I	1	1					1	1
		loam		I	1	1	1				1	1
	l	1	I	I	ı	I	I	I	1	I	I	I

Table H.--Engineering Index Properties--Continued

Map symbol	   Denth	   USDA texture	1	С	lassif	icati	on		Fragi	ments		rcentag sieve n			  Liquid	   Dlag=
and soil name	l pebru	ODDA CEXCUTE	¦							3-10	 	sieve II	unber		limit	
and Soll name			İ	Unif	ied	A	ASHTO			inches	4	10	40	200	- '	index
		<u> </u>	!			<u> </u>			l	l	!	<u> </u>	ļ	ļ		ļ
	In		1			 			Pct	Pct	 	 		1	Pct	 
Beech	0-1		i			 			 							
	1-7	Loam, silt loam	CL,	ML,	CL-ML	A-4,	A-6			0-15	75-100	70-100	65 <b>-</b> 95	50 <b>-</b> 90	20-35	5-10
	7-10	Channery loam,	CL,	ML,	CL-ML	A-4,	A-6			5-15	75-100	70-100	65-95	50-90	20-35	5-10
		channery silt				l										
		loam				l										
	10-22	Channery loam,		ML,	SC	A-4,	A-6,	A-2		10-25	75-100	70-95	60-95	45-85	20-35	5-10
		channery clay	1													
	1 22-36	Channery clay	IMT	СТ	S.C	1 17=6	7 - 4	7 - 2	 	  10=25	  75 <b>-</b> 100	1 170-95	160-05	1/5-85	125-40	I I 5-15
	1 22 30	loam, channery		C1,	bc	11 0 <b>,</b>	11 1,	11 2	! 	1 2 2 3	73 ±00	1 70 33	1	143 03	123 40	1 3 13
	i I	loam	i			i			' 	i I	' 	i I	İ	i	i	' 
	36-45	Very channery	ML,	CL,	SC	A-6,	A-4,	A-2		10-35	75 <b>-</b> 100	70-95	60-95	45-85	20-35	4-12
		loam, very				I										
		channery clay				l										
		loam							<u> </u>							
	45-52	Very channery	CL,	SC,	ML	A-2,	A-4,	A-6		115-45	65-100	160-95	55-95	40-85	120-35	4-12
		loam, very   channery clay	1						 							
	 	loam	1			l I			l I	 	l I	 	 	1	1	 
	1 52-65	Extremely	LCT	MT	SC	IA-2.	A-4.	A-6	 	120-60	165-100	160-95	155-95	140-85	120-35	1 4-12
		channery loam,		,		 	,		İ							
	j	extremely	İ			ĺ				İ	İ	İ	İ	İ	İ	İ
		channery clay				I										
		loam,				l										
		extremely												1		
		channery silt	1									1		1		
		loam	1									1		1		1
	I	T	1			I			I	I	I	I	I	1	I	I

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragi	ments		rcentag			  Liquid	   Plas-
and soil name	l Bobon		¦	1		I 3-10	i	01010 1	. u.i.o 0 1		limit	
			Unified	AASHTO		inches	4	10	40	200	_	index
	   In	-  	 	_ <u> </u>	l   Pct	   Pct		-		-	Pct	
44E:			[ [	I		 		1		1		1
Shelocta	0-0	i	i	i	i		i	i	i	i	·	
		Very stony loam	CL-ML, GM,	A-4	i	3-15	80-95	75-95	60-95	55-90	15-35	NP-10
	4-11 	Silty clay	SC, GC, CL-   ML, CL	A-4, A-6		0-10   	55-95     	50-95   	45-95   	40-90	25-40	4-15   
		Silty clay	  GC, SC, CL-   ML, CL 	A-4, A-6		   0-10   	  55-95     	  50-95     	45-95     	  40-90   	  25-40   	4-15     
	24-39   	Silty clay	CL, CL-ML,   GC, SC   	A-6, A-4		0-10     	  55-95     	50-95     	45-95     	140-90	25-40	4-15     
	39-55   	Silty clay	CL, SC, GC,   CL-ML 	A-4, A-6	     	0-10     	55-95     	50-95     	45-95     	40-90	25-40	4-15     
	55-65   	Silty clay	  SC, CL-ML,   CL, GC     	A-4, A-6	       	0-10         	  55-95         	50-95       	45-95         	40-90       	25-40       	4-15         

Table H.--Engineering Index Properties--Continued

Map symbol	   Donth	   USDA texture		Cl	assif	icati	on		Fragi	ments		rcentag sieve n			  Liquid	   Dlag-
and soil name	l pebru	USDA CEXCUIE	¦						>10	I 3-10	 	sieve II	unber		limit	
and soff name	İ		J [	Jnifi	ed	A	ASHTO			inches	4	10	40	200	- 1	index
	l	.	l			l			·	l	·	l		.	.	l
	In		!			!			Pct	Pct			!		Pct	
Beech	0-1					1			 		l I	 				 
beecii		Loam, silt loam	I CT. – N	ИΤ М	T. CT.	Ι Ι Δ – 4 .	A-6		1	1	 175 <b>-</b> 100	  70 <b>-</b> 100	165-95	150-90	120-35	1 5-10
		Channery loam,			•										120-35	
		channery silt		,	02 112				İ	1					1	1
		loam	İ			i			i İ	i İ	i İ	İ	i	i	i	i İ
	10-22	Channery loam,	CL,	ML,	SC	A-4,	A-6,	A-2		10-25	75-100	70-95	60-95	45-85	20-35	5-10
		channery clay														
		loam	1													
	22-36	Channery clay		CL,	SC	A-6,	A-4,	A-2		10-25	75-100	70-95	60-95	45-85	25-40	5-15
		loam, channery														
		loam						- 0								
		Very channery	SC,	CL,	ML	A-6,	A-4,	A-2		110-35	175-100	170-95	160-95	45-85	20-35	4-12
		loam, very   channery clay				1			 	1	 	 	1			1
	 	loam				1			l I	 	l I	l I	1	1	1	 
	1 45-52	Very channery	ISC.	MT.,	CTı	IA-2.	A-4.	A-6		115-45	165-100	160-95	155-95	140-85	120-35	1 4-12
		loam, very		,		, 	,									
	į	channery clay	ì			İ			İ	į	İ	İ	İ	İ	i	i
	İ	loam	Ì			ĺ			İ	İ	İ		İ	İ		İ
	52-65	Extremely		SC,	ML	A-2,	A-4,	A-6		20-60	65-100	60-95	55-95	40-85	20-35	4-12
		channery loam,														
		extremely														
		channery clay														
		loam,				1							!			
		extremely	!			1										
		channery silt	1			1			1		1	1	1	1		1
	1	TORIN	1			1			 	1	 	l I	1	1	1	1
	I	I	I			1			I	1	I	I	1	1	1	1

Table H.--Engineering Index Properties--Continued

			Classi	fication	Fragi	ments			e passin			
Map symbol   and soil name	Depth	USDA texture	<u> </u>		>10	3-10	:	sieve n	umber		Liquid  limit	
and soll name	 	1	   Unified	AASHTO		3-10  inches	4	10	40	200		index
	l I Tn	l	[	_[	   Pct	l	l	¦		l		 
<u> </u>	İ	į	į	į	İ	į	İ	į	į	İ	į	İ
45C:		1-13. 3			!							- 00
Vandalia	3-7 	· ·		A-4, A-6, A-7   A-4, A-6, A-7							25-45  25-45 	
	 	loam, silty   clay	 									
	 	Channery silty   clay loam,   channery silt   loam, channery	[ [	A-6, A-7     	     	0-5     	75-100     	70-95     	65-90     	60-85     	35-55     	15-30     
	   	clay loam,   channery silty   clay, channery   clay		   	     	     	     	     	     	     	     	     
	15-28         	Channery silty   clay, channery   silt loam,   channery silty   clay loam,   channery clay   loam, channery	MH       	A-6, A-7	           	0-5           	75-100             	70-95             	65-90             	60-85             	35-55             	15-30             
	28-55       	clay  Channery clay,   channery silty   clay, channery   clay loam,   channery silty	MH   	  A-6, A-7   	       	   0-5     	  70-100       	  65-100       	  60-100       	  55-100       	  35-55       	  15-30       
	 	clay loam,   channery silt   loam  Channery silty		      A-7. A-6	     	       0-5	       70-100	      65-100	      60-100	      55-100	      35-55	      15=30
	       	clay, channery   clay, channery   clay loam,   channery silty   clay loam,   channery silt   loam	CH       		           	0 3             				           		
Shelocta												
Beech												

Table H.--Engineering Index Properties--Continued

Man armhal	   Dant':		Classi	fication	Frag	ments			e passin		17.4	Dl
Map symbol   and soil name	ı Depth ı	USDA texture	I		>10	1 3-10	 	sieve n	umber		Liquid  limit	
and soll name	 		Unified	AASHTO		linches	4	10	40	200		index
	   In	<u> </u>	!	_!	   Pct	   Pct	ļ	<u> </u>	<u> </u>	ļ	   Pct	ļ
	l TU		1		PCL	PCL	 	 	 	 	PCL	1
45D:		İ	i	İ	i	į	İ	i	i	İ	i	i
Vandalia				A-4, A-6, A-7					70-95			
	•		ML, CL	A-4, A-6, A-7		0-5	80-100	75-100	70-95	50-90	25-45	5-20
		silty clay										
		loam, clay   loam, silty	1	l I	1	 	 	 	 	 	1	1
		clay					! 	! 	! 	! 		i
, i		Channery silty	ML, CL, CH	A-6, A-7	i	0-5	75-100	70-95	65-90	60-85	35-55	15-30
		clay loam,								l		1
		channery silt										1
		loam, channery										
		clay loam,   channery silty	I	l	1	 	 	 	 	l I	1	1
		clay, channery			i	İ				! 	İ	i
		clay	İ	İ	İ	İ	İ	İ	İ	I	İ	İ
		Channery silty		A-7, A-6		0-5	75-100	70-95	65-90	60-85	35-55	15-30
		clay, channery	CL									
		silt loam,   channery silty	1				 			 	1	1
		clay loam,					! 	! 	! 	! 		i
j		channery clay	i	İ	į	j	İ	i	i İ		į	i
	l	loam, channery	I					1		l		
		clay										
	28-55	Channery clay,   channery silty	ML, MH, CH,	A-6, A-7		0-5	70-100	65-100	60-100	55-100	35-55	15-30
		clay, channery			1	 	 	 	 	 	1	1
		clay loam,	i		i			i			i	i
		channery silty	I					1		l		1
		clay loam,	1								1	1
	 	channery silt										
	l I 55–65	Channery silty	IMI. MH. CI.	  A=7. A=6		1 0-5	I I 70 <b>–</b> 1 0 0	I 165-100	  60-100	I I 55-100	135-55	115-30
		clay, channery			i	0 5	70 100					
		clay, channery		İ	İ	İ	İ	İ	İ	I	İ	İ
		clay loam,	1									1
		channery silty	1		1						1	1
		clay loam,   channery silt			1					 	1	1
	! 	loam					! 	<u> </u>	 	 		
	l		I	1			l	I	l	l		
Shelocta												
Beech	 			 			 	 	 	 		
DGGCII	, I					, ·	, ·=	, .= 	, ·=	 		

Table H.--Engineering Index Properties--Continued

			Classi	fication	Fragi	ments			e passin		I	
Map symbol and soil name	Depth	USDA texture	<u> </u>		>10	3-10	:	sieve n	umber		Liquid  limit	
and soll name	 		   Unified	AASHTO		3-10  inches	4	10	40	200		index
	l I Tn	 	l	_\	l	l	 	 	<u> </u>	 	l	<u> </u>
			i	i								
45E:					1							
Vandalia		•		A-4, A-6, A-7								
			CL, ML	A-4, A-6, A-7		0-5	80-100	75-100	70-95	50-90	25-45	5-20
		silty clay						  -				
		loam, clay   loam, silty			1	1	 	 	1	 	1	
		clay	1		1	 	 	 	 	 	1	 
		Channery silty	CH, CL, ML	A-6, A-7		0-5	75-100	170-95	165-90	160-85	135-55	115-30
		clay loam,			i	i			İ			
		channery silt			1							
		loam, channery										
		clay loam,			1							
		channery silty										
		clay, channery   clay	1	l	1	 	 	 	 	 	1	 
		Channery silty	ICH. MH. MI.	IA-7. A-6	i	1 0-5	I I 75-100	I 170-95	1 165-90	I 160-85	1 135-55	1 115-30
		clay, channery			i		1			00 00 		1
		silt loam,	İ	j	İ	İ	I		İ	I	İ	i İ
		channery silty										
		clay loam,										
		channery clay										
	 	loam, channery	1	l		 	 	 	 	 		 
	l 28-55	Channery clay,	ICT, MH, MT,	  A-6, A-7		I 0-5	170-100	ı 165 <b>–</b> 100	160-100	ı I 55 <b>–</b> 100	135-55	115-30
		channery silty			i							
		clay, channery	1		1							
		clay loam,								l		
		channery silty					<u> </u>			<u> </u>		
		clay loam,   channery silt					 	 		 		
		loam	1		1	 	 	 	 	 	1	 
		Channery silty	MH, ML, CL,	A-7, A-6	i	0-5	70-100	  65-100	60-100	55-100	135-55	15-30
		clay, channery		i	İ	İ	I	I	İ	I	į	į
		clay, channery										
		clay loam,										
		channery silty										
		clay loam,   channery silt	1	l	1	 	 	 	 	 	1	 
		loam	İ	İ			' 					
Shelocta	 					 	 	 	 	 		 
- ·	ļ		ļ.	Ţ	1	I	ļ	l ·	I	l ·		!
Beech												

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	Fragi	ments			e passi: umber		  Liquid	   Plas-
and soil name	, - <u>1</u> -	İ	i		>10	I 3-10	i				llimit	
	 		Unified	AASHTO	inches	linches	4	10	40	200		lindex
	   In	.			   Pct	Pct					Pct	
47:	 		 	 		 	 	 	 	 		
Guyan	I 0-5	Silt loam, loam	CL-ML, ML	A-4	i	I 0	95-100	95 <b>-</b> 100	95 <b>-</b> 100	65-80	120-30	5-10
4		Silt loam, loam		A-4	i		95-100	95-100	95-100	65-80	20-30	5-10
	10-16	Silt loam,	ML, CL-ML	A-4							20-30	5-10
	•	loam, silty   clay loam	 			 	1	l I	 	 		 
		loam, silt	ML, CL	A-4, A-6		0	85-100 	80-100 	80-100	70-95 	25-40	10-18
	   50-65 	loam, loam  Silty clay   loam, loam,	  ML, CL 	  A-4, A-6 		   0 	  85-100 	  80-100 	  80-100 	  70-95 	  25-40 	10-18
	 	silt loam	I I	I I		 	1	 	 	 		
Cotaco												
Monongahela	 											
Purdy	 							 				
71B:	 		 			 		 	 	 		
Kaymine	0-3	Channery loam,   channery silt   loam		A-1, A-2		15-30 	45-60 	40-55 	30-50 	20-40	25-35 	7 <b>-</b> 12
	3-23   	Very channery	SC, SM	A-1, A-2	   	20-60   	30-55   	  25-55   	20-45   	  15-40 	25-35 	7-12 
	   23-65	loam  Extremely	  SC-SM. GM.	  A-1, A-2		  20-60	  30-55	  25 <b>-</b> 55	  20-45	  15-40	  25-35	   7 <b>-</b> 12
		channery loam,				   		   		   		, 12
		channery silt	İ	İ	i		İ	İ		i		
		loam	I	1	ĺ					I	1	
		1	I	T	I						1	

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif 	ication	į	ments	l Pe	_	e passi umber	-	  Liquid	
and soil name		 	   Unified	AASHTO		3-10  inches		10	40	200	limit 	ticity  index
	In	! !	' 		Pct	Pct	! !	¦	! <del></del>		Pct	! !
Fiveblock		  Channery loam,   channery sandy   loam		A-1, A-2		15-30	  55-70   	  50-65 	  35-50 	  10-25   	  15-25 	  NP-7 
		Very channery   sandy loam,   very channery   loamy sand	GM, SC-SM	A-1, A-2	   	15-30	55-70   	50-65 	35-50 	10-25	15-25	NP-7 
	25-50     			A-1, A-2     		  30-55       	  45-65       	25-50       	  15-35       	  10-20       	  15-25       	  NP-7       
	50-65 	Very flaggy	GC-GM, GM,  SC-SM, SM 	A-1, A-2		30-55   	45-65     	25-50	15-35	10-20	  15-25   	NP-7     
Sewell	 											
Cedarcreek												
Fairpoint		 	 									
Other Soils		 	 									
71F: Kaymine		    Channery loam,   channery silt   loam		  A-1, A-2		  15-30 	    45-60 	40-55	30-50	20-40	25-35	   7-12 
		Very channery	GM, GM	A-1, A-2		20-60   	30-55     	  25-55   	20-45	15-40   	25-35   	7-12   
	23-65 		SC-SM, SM	A-1, A-2       		20-60       	30-55         	25-55       	20-45       	15-40         	25-35         	7-12         

Table H.--Engineering Index Properties--Continued

Map symbol	l Depth	   USDA texture	Classif	icati	on	Fragi	ments			e passi umber		  Liquid	   Plas-
and soil name	-   	 	   Unified	   A	ASHTO	>10  inches		   4	10	40	200	limit	ticity  index
	l I Tn	 	<u> </u>	<u> </u>		_	l   Pct	l		¦			 
		i	i I	i					İ	i	i		
Fiveblock	İ	Channery loam,   channery sandy   loam		A-1,   	A-2		15-30   	55-70   	50-65   	35-50   	10-25   	15-25   	NP-7   
	 	Very channery   sandy loam,   very channery   loamy sand	SC-SM, GM,   SC, GC-GM 	A-1,     	A-2	     	15-30     	55-70     	50-65     	35-50     	10-25     	15-25     	NP-7     
	 	Extremely   flaggy sandy   loam,   extremely   flaggy loamy		A-1,       	A-2		30-55       	45-65       	25-50       	15-35     	10-20       	15-25       	NP-7     
	   50-65 	sand  Very flaggy	  GC-GM, GM,   SC-SM, SM	  A-1,   	A-2	     	  30-55   	  45-65   	  25-50   	  15-35   	  10-20   	  15-25   	  NP-7 
Sewell	 			 			 	 					 
Fairpoint				 			 	 					 
Other Soils								 					 
74F: Kaymine				  A-1, 	A-2		  15-30   	  45-60 	  40-55 	30-50	  20-40 	  25-35 	   7-12 
		Very channery   silt loam,   very channery   loam	SC, SM	A-1,   	A-2	     	20-60     	30-55     	25-55     	20-45	15-40     	25-35   	7-12   
		Extremely   channery loam,   extremely   channery silt   loam		A-1,       	A-2		20-60         	30-55       	25-55         	20-45       	15-40       	25-35         	7-12       

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classif:	cation	Fragi	ments		rcentag sieve n	-	_	  Liquid	   Plas-
and soil name	l				>10	3-10					limit	ticity
			Unified	AASHTO	linches	linches	4	10	40	200		index
	   In				Pct	Pct			\ <u></u>	¦	Pct	
Cedarcreek	   0-3   	  Very channery   loam, very   channery sandy   loam, very   channery silt	İ	A-2, A-4, A-6	         	  25-45       	  45-60       	  40-55     	  30-50     	  20-40     	  25-35     	   8-12     
	   3-25     	loam  Very channery   loam, very   channery sandy   loam, very   channery silt	İ	A-2, A-4	         	  30-60     	  45-60       	  40-55     	  30-50     	  20-40     	  25-35     	   8-12     
	   25-50   	loam  Very channery   loam, very   channery sandy   loam, very   channery silt	İ	A-2, A-4	       	  30-60       	  45-60     	  40-55     	  30-50     	  20-40     	  25-35       	   8-12     
	50-65		İ	A-2, A-4	               	  40-75             	  30-55             	  25-50           	20-45           	15-40           	  25-35           	   8-12           

Table H.--Engineering Index Properties--Continued

Map symbol	   Donth	   USDA texture	Classi	fication	Frag	ments		rcentag	e passi umber		  Liquid	   Dlag-
and soil name	l nebru	USDA LEXEUTE	 		1 >10	I 3-10	! 	sieve II	uniber		limit	
		į	   Unified	AASHTO		inches	4	10	40	200	- 1	index
I	   In	l	 	1	Pct	Pct	 	\	.		Pct	
Materian	   0-1											
Matewan      	1-3	Sandy loam,   loam, fine   sandy loam	  CL, CL-ML   	A-4 	   	0-5 	  80-90 	75-85 	70-80 	1	110-30	  NP-10 
		Channery sandy   loam, channery   loam, channery   fine sandy   loam	SM, GM	A-1, A-2, A-4	       	0-10     	50-90       	40-80     	40-75     	20-55       	10-30     	NP-10       
		Channery sandy   loam, channery   fine sandy   loam, channery   loam	ML, SM	A-1, A-2, A-4	     	5-15     	50-90         	140-80	40-75     	20-55       	10-30	NP-10       
		Channery sandy   loam, channery   fine sandy   loam, channery   loam	ML, SM	A-1, A-2, A-4	     	15-30       	50-90       	40-80     	40-75     	20-55       	15-30     	NP-10       
             		channery sandy   loam,   extremely   channery loamy   sand,   extremely   channery loam	ML, SM         	A-1, A-2, A-4         	             	30-60           	50-90               	140-80	20-65             	20-55             	15-30             	NP-10             
	31-36											
Fiveblock	 		 				 					
Fairpoint	 		 				 					
Other Soils	 						 					

Table H.--Engineering Index Properties--Continued

		I	Classif	ication	Frag	ments		rcentag				Ī
Map symbol	Depth	USDA texture	l		l			sieve n	umber		Liquid	
and soil name						3-10	!				limit	
	 	 	Unified	AASHTO	inches	inches	4	10	40	200	1	index
	In	'	'   	' <u></u>	Pct	Pct	'				Pct	
75F:	 	 	 	 		 		1		1		
Cedarcreek	0-3	Very channery   loam, very   channery sandy   loam, very   channery silt	ĺ	A-2, A-4, A-6       	         	25-45         	45-60         	40-55       	30-50       	20-40       	25-35       	8-12         
	3-25     	Very channery   loam, very   channery sandy   loam, very   channery silt	i I I	A-2, A-4     	         	30-60         	45-60         	40-55     	30-50	20-40	25-35       	8-12       
		Very channery   loam, very   channery sandy   loam, very   channery silt   loam	 	A-2, A-4     	         	30-60       	45-60         	40-55     	30-50     	20-40	25-35       	8-12       
	50-65		Ī	  A-2, A-4             	             	40-75             	  30-55             	25-50             	20-45           	15-40	25-35             	8-12             
Rock Outcrop												
Other Soils	   	   	   	   	   	   	   	   	   	   	   	   

Table H.--Engineering Index Properties--Continued

Map symbol	l Depth	   USDA texture	Classif:	ication	Fragr	ments		rcentage	e passinumber		  Liquid	   Plas-
and soil name			Unified	   AASHTO	>10  inches		4	10	40		limit	
	   In	 	 	 	   Pct	   Pct		' 		' 	Pct	' 
121:												
Lindside		Loam, fine  sandy loam,  silt loam	  CL, ML 	  A-4, A-6 	   		90-100	  80-100 	  65-100 	  55 <b>-</b> 95 	15-35	  NP-10 
	8-15 	Loam, fine	CL, ML, SC, SM	A-4, A-6 	   	0     0   	90-100	  80-100 	  65-95   	  55 <b>-</b> 95 	15-35	NP-10 
	15-40	Loam, clay	CL, ML, SC, SM	A-4, A-6 	   	0	90-100	  80-100 	  65-95 	  60-95 	15-35	NP-10 
	40-50     	Sandy loam,	CL, ML, SC,	A-2, A-4, A-6	       		65-100	  55-100       	  35-95       	  20-75       	15-35         	NP-15         
	50-65       	Sandy loam,	CL, SC, ML, SM	A-2, A-4, A-6	       		65-100	  55-100       	  35-95         	  20-75         	15-35         	  NP-15       
Melvin	 		 	 	 	 		 		 		
Newark	 	 				 		 		 		 
Senecaville	 	 				 	 	 		 		 
122: Senecaville	6-16		  CL, ML, CL-ML  CL, ML, CL-ML		   				  75-100  85-100		  20-35  20-35 	   4-12   4-12 
	16-30	•	CL, CL-ML, ML	A-4, A-6 	   	0     0   	90-100	  90-100 	85-100 	  75-95   	25-40	4-18   
	30-48 	Silt loam, fine   sandy loam,   loam	CL, CL-ML, ML	A-4, A-6 	   	   0   	90-100	  90-100 	85-100 	75-95 	20-40	4-15   
	48-65 	Fine sandy	CL, SC, SM,   ML	A-4, A-6	     	0	85-100	70-100 	65-95   	45-90 	20-40	4-15   
Lindside	 		 	 				 		 		 
Melvin						 		 		 		

Table H.--Engineering Index Properties--Continued

Map symbol	   Depth	   USDA texture	Classi	fication	I	ments		rcentage sieve n		ng	  Liquid	
and soil name			Unified	AASHTO	>10  inches	3-10  inches	   4	10	40	200	limit	ticity  index
	   In 	   	_		   Pct 	   Pct 	   	   	   	   	   Pct 	   
124B:	 				 	 	 	 	 	 		
Cotaco		Loam, fine   sandy loam,   silt loam	CL, ML   	A-4, A-6 	   	0   	90-100   	80-100   	65-100   	55-95   	15-35   	NP-10   
	8-15	Loam, fine   sandy loam,   silt loam	CL, ML, SC,	A-4, A-6	 	0 	90-100   	80-100   	65-95   	55-95   	15-35 	NP-10 
	15-40	Loam, clay   loam, sandy   clay loam	SM, SC, ML,	A-4, A-6	   	0   	90-100	  80-100 	  65-95 	  60-95 	15-35	NP-10
	40-50	Sandy loam,   fine sandy   loam, loam,   sandy clay   loam, clay	CL, ML, SC,   SM 	A-2, A-4, A-6	       	0       	65-100       	55-100       	35-95       	20-75       	15-35       	NP-15       
		loam  Sandy loam,   fine sandy   loam, loam,   sandy clay   loam, clay   loam	CL, SC, ML,   SM 	A-2, A-4, A-6	         	   0       	  65-100         	  55-100         	  35-95         	  20-75         	  15-35       	  NP-15       
Urban Land		Loam, fine   sandy loam,   silt loam	ML, CL	A-4, A-6	   	   0 	  90-100 	  80-100 	  65-100 	  55-95 	15-35	NP-10
		Loam, fine   sandy loam,	SM, SC, ML,	A-4, A-6		   0 	  90-100 	  80-100 	  65-95 	  55-95 	15-35	NP-10
	15-40	silt loam  Loam, clay   loam, sandy	SM, SC, ML,	A-4, A-6	   	   0 	  90-100 	  80-100 	  65-95 	  60-95 	15-35	NP-10
		clay loam  Sandy loam,   fine sandy   loam, loam,   sandy clay   loam, clay   loam	CL, ML, SC,   SM	A-2, A-4, A-6	       	   0     	  65-100     	  55-100       	  35-95       	  20-75       	  15-35       	  NP-15     
	50-65       	Sandy loam,   Sandy loam,   fine sandy   loam, loam,   sandy clay   loam, clay   loam	CL, SM, ML,   SC	A-2, A-4, A-6	           	   0       	  65-100         	  55-100         	  35-95         	  20-75         	15-35         	NP-15         
  Allegheny	 				 	 	 	 	 	 		

Table H.--Engineering Index Properties--Continued

Map symbol	Depth	   USDA texture	Classif	ication	Fragr	nents		rcentage			  Liquid	   Plas-
and soil name			Unified	   AASHTO	>10  inches	3-10  inches	4	10	40		limit	
	In	'	 	'	Pct	Pct	' 	'	'	' 	Pct	'
Other Soils	     <b></b>	   	   	   	   		   	   	   	   		   
124C:   Cotaco	0-8	Loam, fine	CL, ML	  A-4, A-6	 	0	,     90=100	  80-100	    65-100	  55-95	    15-35	  NP-10
		sandy loam,   silt loam			   		   	   	   			
	8-15		CL, ML, SC,	A-4, A-6	   	0	90-100	  80-100 	  65-95 	  55 <b>-</b> 95 	15-35	NP-10
	15-40	Loam, clay   loam, sandy	CL, SM, SC,	A-4, A-6	   	0	90-100	  80-100 	  65-95 	  60-95 	15-35	NP-10
 	40-50	clay loam  Sandy loam,   fine sandy   loam, loam,   sandy clay   loam, clay	SM, SC, ML,   CL 	  A-2, A-4, A-6     	       	0	  65-100     	  55-100     	  35-95       	  20-75       	  15-35     	  NP-15     
	50-65	loam  Sandy loam,   fine sandy   loam, loam,   sandy clay   loam, clay	  SC, CL, ML,   SM   	  A-2, A-4, A-6       	         		  65-100       	  55-100         	  35-95       	  20-75         	  15-35         	  NP-15       
Urban Land  		  Loam, fine   sandy loam,   silt loam	  CL, ML 	  A-4, A-6 	   	0	  90-100 	  80-100 	  65-100 	  55 <b>-</b> 95 	115-35	  NP-10 
	8-15	Silt loam  Loam, fine   sandy loam,   silt loam	SM, CL, ML,	A-4, A-6	   	0	  90-100 	  80-100 	  65-95 	  55-95 	15-35	NP-10 
	15-40	Loam, clay   loam, sandy   clay loam	CL, SM, ML,   SC	A-4, A-6	   	0	  90-100 	  80-100 	  65-95 	  60-95 	15-35	NP-10
	40-50	Cary Foam   Sandy   fine sandy   loam, loam,   sandy clay   loam, clay   loam	ML, CL, SM,   SC 	  A-2, A-4, A-6     	       	0	  65-100     	  55-100       	  35-95       	  20-75       	15-35       	NP-15         
 	50-65	Sandy loam,	SM, ML, SC,   CL	A-2, A-4, A-6     	         		  65-100       	  55-100         	  35-95         	20-75           	15-35       	NP-15         

Table H.--Engineering Index Properties--Continued

		1	Classif	ication	Fragi	ments	Pe	rcentag	e passi	.ng		
Map symbol	Depth	USDA texture	l		I			sieve n	umber			Plas-
and soil name						3-10					_ limit	ticity
			Unified	AASHTO	inches	inches	4	10	40	200		index
	l	l	 	l	I	lI		l	l	1	_	.l
	In				Pct	Pct					Pct	
	l											
Allegheny												
011 0-11-					l							
Other Soils												
180:	 			1	l I			1	 		1	1
Urban Land	l I –––	 						 	 			
Olban Land	 	 		1	1	 		1	 	1		
Other Soils	 				i							
	i I			İ	i	i i		i	İ	i	i	i
181:	i I	I		i	i	i i		i	İ	i	i	i
Udorthents				i	i	i i		i				i
	I											
Urban Land												
M:												
Udorthents												
					I							
Other Soils												
				1	I			1				
	l	l		l		I		l	I	I	_	l